



Aperture 3.4

User Guide

🍏 Apple Inc.

© 2012 Apple Inc. All rights reserved.

Your rights to the software are governed by the accompanying software license agreement. The owner or authorized user of a valid copy of Aperture software may reproduce this publication for the purpose of learning to use such software. No part of this publication may be reproduced or transmitted for commercial purposes, such as selling copies of this publication or for providing paid for support services.

The Apple logo is a trademark of Apple Inc., registered in the U.S. and other countries. Use of the “keyboard” Apple logo (Shift-Option-K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

Every effort has been made to ensure that the information in this manual is accurate. Apple is not responsible for printing and clerical errors.

Apple
1 Infinite Loop
Cupertino, CA 95014
408-996-1010
www.apple.com

Apple, the Apple logo, Aperture, AppleScript, Apple TV, ColorSync, Finder, FireWire, GarageBand, iLife, iPad, iPhone, iPhoto, iPod, iTunes, iWork, Keychain, Mac, Mac OS, OS X, QuickTime, and Safari are trademarks of Apple Inc., registered in the U.S. and other countries.

Multi-Touch is a trademark of Apple Inc.

iCloud is a service mark of Apple Inc., registered in the U.S. and other countries.

Adobe and Photoshop are trademarks or registered trademarks of Adobe Systems Incorporated in the U.S. and/or other countries.

iOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

UNIX is a registered trademark of The Open Group.

The YouTube logo is a trademark of Google Inc.

Other company and product names mentioned herein are trademarks of their respective companies. Mention of third-party products is for informational purposes only and constitutes neither an endorsement nor a recommendation. Apple assumes no responsibility with regard to the performance or use of these products.

019-2507

Contents

17	Chapter 1: Aperture Basics
17	What Is Aperture?
18	Aperture Workflow Overview
20	Aperture Interface Overview
24	Basic Components of Aperture
24	An Overview of the Basic Components of Aperture
24	What Are Originals?
24	What Are Versions?
25	What Are Projects?
26	What Are Albums?
27	What Are Folders?
27	What Is the Library?
28	What Are Managed Images and Referenced Images?
29	What Is the Aperture Trash?
29	What Is a Vault?
29	Opening Aperture for the First Time
31	Chapter 2: Working with the Aperture Library
31	Organizing Items in the Library Inspector
31	An Overview of the Library Inspector
33	Using More Than One Album in a Project
33	Creating and Naming Projects
34	Opening and Closing Items in the Library Inspector
36	Arranging Items in the Library Inspector
37	Creating and Showing Favorite Items
37	Duplicating a Project Structure
38	Merging Projects
38	Working with the Aperture Trash
39	Working with Library Files
39	An Overview of Library Files
39	Creating New Libraries
40	Viewing Other Libraries
41	Merging Libraries
43	Opening Your Library in iPhoto
43	Working in Projects View
43	Switching to Projects View
43	Previewing the Photos in a Project in Projects View
43	Creating and Deleting Projects in Projects View
44	Importing Files into a Project in Projects View
44	Merging Projects and Libraries into Projects in Projects View
44	Setting the Key Photo for a Project
45	Emptying the Aperture Trash in Projects View

45	Playing a Slideshow of a Project's Photos
45	Organizing Projects in Projects View
48	Working with the Info HUD in Projects View
50	Chapter 3: Importing Photos
50	An Overview of Importing Photos
51	File Formats You Can Import into the Library
52	Planning Your Import Strategy
53	Importing from Your Digital Camera or Card Reader
57	Importing Files Stored on Your Computer or Connected Servers
60	Adding Import Options
60	An Overview of Import Options
60	Viewing File Information
60	Automatically Naming Your Imported Photos
62	Applying Valid Filenames
62	Creating Custom Name Formats
64	Automatically Backing Up Your Imported Files
64	Adjusting the Image File's Time When Importing
65	Adding Metadata to Photos During Import
66	Applying Effects to Photos During Import
66	Filtering Files by Type During Import
67	Importing RAW + JPEG Image Pairs
68	Using AppleScript Actions Immediately After Import
68	Resetting Your Import Settings
69	Importing Files from the Finder via Drag and Drop
69	Capturing Photos as You Work
70	Importing Folders of Files from the Finder
72	Importing Originals for Referenced Images into Folders
74	Where Aperture Stores Your Managed Files in the Library
74	Adding Audio Attachments to Image Files
76	Reprocessing Photos from Previous Versions of Aperture
76	An Overview of Reprocessing Photos
76	Strategies for Reprocessing Photos
76	Reprocessing a Photo Selection
78	Reprocessing Photos Individually
79	Chapter 4: Working with Photos in the Browser
79	An Overview of the Browser
81	Navigating Through and Selecting Photos
81	Navigating Through Photos in the Browser
82	Selecting Photos
83	Navigating Through Photos in Quick Preview Mode
84	Working with Browser Views
84	Working with Photos in Filmstrip View
85	Working with Photos in Grid View
86	Working with Photos in List View
88	Choosing a Workspace View
89	Working with Two or More Browsers Open
89	Viewing Photos with the Loupe
89	An Overview of the Loupe
90	Moving the Loupe

90	Using the Pointer to Magnify Parts of a Photo
91	Changing the Size and Magnification of the Loupe
92	Displaying a Pixel Grid and Color Values
93	Using the Alternate Loupe
94	Searching for Photos in the Browser
95	Rearranging and Sorting Photos in the Browser
96	Rotating Photos
97	Creating Versions of a Photo
97	Deleting Photos from the Browser
98	Dragging Photos into Different Projects and Albums
99	Renaming Original Image Files
99	Working with Referenced Images
99	An Overview of Referenced Images
100	Identifying Referenced Images
100	Displaying a List of Referenced Images
101	Locating a Referenced Image's Original on a Hard Disk
102	Reconnecting Missing or Offline Referenced Images
103	Relocating Referenced Originals
103	Moving Referenced Originals to the Aperture Library
103	Searching for Referenced Images Using the Filter HUD
104	Working with Stacks in the Browser
105	Displaying Specific Metadata with Your Photos
107	Chapter 5: Displaying Photos in the Viewer
107	An Overview of the Viewer
109	Customizing the Viewer Display
110	Comparing Photos
111	Viewing Stacks
111	Viewing Photos at Full Resolution
112	Viewing Original Photos
112	Working with Audio and Video in the Viewer
115	Displaying Metadata Associated with Photos
116	Viewing Photos on Multiple Displays
116	Showing Hot and Cold Areas in Your Photos
117	Setting Up the Viewer for Onscreen Proofing
118	Working with Preview Images
118	An Overview of Preview Images
119	Setting Preview Preferences
119	Controlling Previews with the Library Action Pop-Up Menu
119	Controlling Previews with Shortcut Menus
120	Rescheduling JPEG Preview Maintenance
120	Rendering Preview Images
121	Determining Which Versions Have Previews
121	Integration with iLife and iWork
122	Displaying Offline Referenced Images
122	Suppressing Preview Generation
123	Sample Workflows for Using Previews Effectively
125	Chapter 6: Viewing Photos in Full Screen View
125	An Overview of Full Screen View
127	Entering and Exiting Full Screen View

127	Working in Viewer Mode in Full Screen View
130	Working in Browser Mode in Full Screen View
131	Working in Projects Mode in Full Screen View
132	Using HUDs in Full Screen View
134	Changing the Display of Metadata in Full Screen View
135	Chapter 7: Stacking Photos and Making Picks
135	An Overview of Stacking Photos
136	Creating Stacks
138	Working with Stacks
138	Opening and Closing Stacks
138	Designating a Pick Photo for a Stack
139	Designating an Album Pick for a Stack
139	Arranging Photos in a Stack
139	Adding Photos to and Removing Photos from Stacks
140	Splitting Stacks
141	Dragging Stacks
141	Comparing Photos in Stacks
142	Working with Stacks in List View
143	Chapter 8: Rating Photos
143	An Overview of the Aperture Rating System
145	Rating Individual Photos
146	Rating Multiple Photos
146	Sorting Photos by Rating
148	Including Photo Rating in Your Workflow
149	Comparing and Rating Photos
152	Chapter 9: Applying Keywords to Photos
152	An Overview of Keywords
154	Displaying Keywords in the Viewer and Browser
155	Viewing a Photo's Keywords Using the Info Inspector
156	Viewing Keywords in the Browser in List View
157	Applying Keywords Using the Keywords HUD
157	An Overview of the Keywords HUD
157	Using the Keywords HUD to Apply Keywords
159	Browsing and Searching for Keywords
159	Adding Keywords to the Keywords HUD
161	Removing Keywords from the Keywords HUD
162	Modifying Existing Keywords in the Keywords HUD
162	Applying Keywords Using Keyword Controls and Keyword Presets
162	An Overview of the Keyword Controls in the Control Bar
163	Choosing a Keyword Preset Group
163	Adding Preset Keywords to Photos Using Keyword Controls
165	Creating a Keyword Preset Group
167	Applying Keywords Using the Lift & Stamp HUD
169	Applying Keywords Using the Info Inspector
170	Applying Keywords to Photos in the Light Table
171	Removing Keywords from a Photo
171	Exporting and Importing Keyword Lists

172	Chapter 10: Working with Metadata
172	An Overview of Working with Metadata
175	Showing the Info Inspector
176	Displaying Metadata with Your Photos
176	An Overview of Metadata Overlays
178	Turning the Display of Metadata On or Off
179	Specifying the Type of Metadata to Display in the Viewer and Browser
183	Viewing and Changing Metadata in the Info Inspector and Inspector HUD
187	Working with the AutoFill Editor
187	Working with Metadata Views
187	An Overview of Metadata Views
189	Creating New Metadata Views
190	Modifying Existing Metadata Views
190	Managing Metadata Views
191	Working with Metadata Presets
191	Creating Metadata Presets
192	Applying Combinations of Metadata Using Metadata Presets
193	Managing Metadata Presets
194	Batch Changing Metadata
195	About IPTC Metadata
196	Understanding Badge Overlays
196	Working with Badge Overlays
197	Displaying Photos with Badge Overlays
198	Adjusting the Photo Date and Time
199	Chapter 11: Organizing Photos with Faces
199	An Overview of Faces
201	Adding Names to Faces in Your Photos
203	Viewing Photos in Faces View
206	Searching for Photos by Face
207	Creating Smart Albums with Photos of People
208	Chapter 12: Locating and Organizing Photos with Places
208	An Overview of Places
211	Viewing Photo Locations
216	Changing the Map View
217	Adding Locations to Photos
220	Changing Photo Locations
221	Searching for Locations
222	Removing Locations
222	Importing and Working with GPS Track File Data
223	Assigning Location Information to Projects
225	Working with Location Information Using the Info Inspector
229	Chapter 13: Searching for and Displaying Photos
229	An Overview of Searching
229	Performing Quick Searches Using the Search Field Pop-Up Menu
231	About the Filter HUD
235	Searching by Rating
236	Searching for Flagged Photos
236	Searching by Color Label

237	Searching by Photo Name, Caption, or Other Text
239	Searching by Keyword
240	Searching by Adjustments
241	Searching by Aperture Metadata
242	Searching by Attachment
242	Searching by Calendar
243	Searching by Date
244	Searching by EXIF Information
245	Searching by Face
246	Searching by File Status
247	Searching by File Type
248	Searching by Import Session
249	Searching by IPTC Information
250	Searching by Photo Usage
251	Searching by Place
252	Searching by a Combination of Criteria
253	Searching Across the Entire Library
253	Saving Your Search Results
255	Chapter 14: Grouping Photos with Smart Albums
255	An Overview of Smart Albums
257	Collecting Photos in a New Smart Album
259	Searching Within a Smart Album
259	Revising the Contents of a Smart Album
260	Transferring Smart Album Photos to Another Project or Album
260	Deleting a Smart Album
261	Working with Library Albums
262	Chapter 15: An Overview of Image Adjustments
262	Adjustments in Aperture
265	Using the Adjustment Controls
265	Using the Adjustments inspector and Inspector HUD
268	Using Sliders
269	Working with Adjustment Tools in the Tool Strip
269	Using the Brush Controls
270	Resetting and Turning Off Adjustments
271	Accessing Adjustment Controls from Aperture Editors
271	Performing Adjustments in Full Screen View
272	Applying Adjustments to a Group of Images
274	Applying the Same Adjustment to an Image Multiple Times
274	Working with Effects
274	An Overview of Effects
275	Creating Effects
276	Applying Effects
277	Removing Adjustments from an Effect
278	Renaming Effects
279	Organizing Effects
281	Deleting Effects
281	Sharing Effects
282	Restoring the Default Effects
282	Working with Adjustments Applied in iOS Devices

282	Removing Adjustments
283	Using Modifier Keys to Identify Color Clipping
283	Identifying Color Channel Clipping
284	Setting Color Channel Clipping Overlay Colors
284	Color Overlay Descriptions
285	Monochrome Overlay Descriptions
286	Using the Color Meter and Displaying Camera Information
288	Using an External Editor
289	Working with the RAW Fine Tuning Controls
289	An Overview of the RAW Fine Tuning Controls
290	Using the Boost Controls
291	Using the Sharpening Controls
292	Using the Moire Controls
293	Working with DNG Files
294	Setting the Camera Default
295	Working with iPhoto Effects
295	Understanding How to Read Histograms
295	An Overview of Histograms
296	Evaluating Exposure
297	Evaluating Tonality and Contrast
298	About Making Adjustments Onscreen
299	Chapter 16: Making Image Adjustments
299	Working with the Auto Enhance Button
300	Working with the Retouch Controls
300	An Overview of the Retouch Adjustment Controls
301	Repairing Your Images
302	Cloning Your Images
303	Deleting Retouch Brush Strokes
304	Working with the Red Eye Correction Controls
304	An Overview of the Red Eye Adjustment
304	Reducing Red-Eye Using the Red Eye Tool
305	Adjusting the Size of Red Eye Target Overlays
307	Adjusting the Sensitivity of Red Eye Target Overlays
308	Viewing the Corrected Image Without Red Eye Target Overlays
308	Moving Red Eye Target Overlays
309	Deleting Red Eye Target Overlays
309	Working with the Spot & Patch Controls
309	An Overview of the Spot & Patch Adjustment
310	Spotting Your Images
311	Patching Your Images
314	Adjusting the Size of Spot & Patch Target Overlays
315	Adjusting the Softness Within Spot & Patch Target Overlays
316	Adjusting the Opacity Within Spot & Patch Target Overlays
317	Adjusting the Detail Within Spot & Patch Target Overlays
317	Viewing the Corrected Image Without Spot & Patch Target Overlays
318	Moving Spot & Patch Target Overlays
318	Deleting Spot & Patch Target Overlays
319	Working with the Straighten Controls
319	An Overview of the Straighten Adjustment
319	Rotating Images with the Straighten Tool

320	Rotating Images with the Straighten Controls
321	Working with the Crop Controls
321	An Overview of the Crop Adjustment
321	Cropping Images with the Crop Tool
324	Cropping Images with the Crop Controls
325	Working with the Flip Controls
326	Working with the Chromatic Aberration Controls
327	Working with the Devignette Controls
329	Working with the Noise Reduction Controls
330	Working with the White Balance Controls
330	An Overview of the White Balance Adjustment
331	Adjusting White Balance Automatically
333	Adjusting White Balance Manually
335	Working with the Exposure Controls
335	An Overview of the Exposure Adjustment
335	Using the Auto Exposure Button
336	Correcting Exposure in the Image
337	Recovering Highlight Details in the Image
338	Setting the Image's Blacks
339	Adjusting Brightness in the Image
340	Working with the Enhance Controls
340	An Overview of the Enhance Adjustment
340	Adjusting Contrast in the Image
341	Adjusting Definition in the Image
342	Adjusting Saturation in the Image
343	Adjusting Vibrancy in the Image
344	Setting the Tint of Black, Gray, and White Values in the Image
344	Using the Eyedroppers to Set the Tint in an Image
349	Manually Setting the Tint in an Image
350	Working with the Curves Controls
350	An Overview of the Curves Adjustment
350	Curves Adjustment Controls
351	Working with the Auto Curves Buttons
353	Adjusting the Tonal Curve of an Image Using the Curves Controls
357	Using Eyedropper Tools to Set Black, Gray, and White Points
361	Using the Curves Controls for Color Correction
362	Adjusting the Tonal Curve of the Red Color Channel
362	Adjusting the Tonal Curve of the Green Color Channel
363	Adjusting the Tonal Curve of the Blue Color Channel
363	Working with the Highlights & Shadows Controls
363	An Overview of the Highlights & Shadows Adjustment
364	Adjusting Highlights, Shadows, and Midtone Contrast
365	Upgrading Images Previously Adjusted with Highlights & Shadows Adjustment Controls
366	Working with the Original Highlights & Shadows Adjustment Controls
367	Working with the Levels Controls
367	An Overview of the Levels Adjustment
368	Automatically Adjusting Luminance
369	Automatically Adjusting RGB Channels
370	Setting the Auto Levels Options
372	Adjusting the Luminance Levels in an Image
374	Showing Quarter-Tone Levels Controls

374	Adjusting the Brightness of an Image
375	Using Levels for Color Correction
375	Adjusting the Levels of the Red Color Channel
376	Adjusting the Levels of the Green Color Channel
376	Adjusting the Levels of the Blue Color Channel
377	Working with the Color Controls
377	An Overview of the Color Adjustment
377	About Hue, Saturation, and Luminance
378	Adjusting the Color of the Image with the Color Controls
381	Adjusting Custom Colors Using the Color Eyedropper
382	Working with the Black & White Controls
383	Working with the Color Monochrome Controls
384	Working with the Sepia Tone Controls
385	Working with the Sharpen and Edge Sharpen Controls
385	An Overview of the Sharpen and Edge Sharpen Adjustments
385	Working with the Edge Sharpen Controls
387	Understanding the Edge Sharpen Workflow
388	Working with the Sharpen Controls
389	Working with the Vignette Controls
392	Chapter 17: Making Brushed Adjustments
392	An Overview of Brushed Adjustments
395	Using Brushed Adjustment Controls
395	Working with Controls in the Brush HUD
396	Applying Brushed Adjustments
399	Applying Quick Brush Adjustments
401	Working with Brush Strokes
404	Working with Brushed Adjustment Overlays
407	Limiting the Tonal Range of Brushed Adjustments
408	Working with the Skin Smoothing Quick Brush Controls
409	Working with the Dodge Quick Brush Controls
410	Working with the Burn Quick Brush Controls
411	Working with the Polarize Quick Brush Controls
412	Working with the Intensify Contrast Quick Brush Controls
413	Working with the Tint Quick Brush Controls
414	Working with the Contrast Quick Brush Controls
415	Working with the Saturation Quick Brush Controls
416	Working with the Definition Quick Brush Controls
418	Working with the Vibrancy Quick Brush Controls
419	Working with the Blur Quick Brush Controls
420	Working with the Sharpen Quick Brush Controls
421	Working with the Halo Reduction Quick Brush Controls
422	Working with the Noise Reduction Quick Brush Controls
423	Chapter 18: Printing Your Photos
423	An Overview of Printing
424	Working with the Print Controls
426	Printing Photos and Contact Sheets in Aperture
426	Printing a Single Photo
428	Printing Multiple Copies of a Photo on a Page
429	Printing a Series of Photos

429	Printing a Contact Sheet or Series of Contact Sheets
430	Manually Adjusting Photo Layout in the Preview Area
432	Printing a Book
433	Printing a Light Table Arrangement
434	Creating and Modifying Print Presets
435	Proofing Your Images Onscreen
435	Turning Off Color Management in Your Printer
436	Chapter 19: Exporting Your Photos
436	An Overview of Exporting Photos
437	Exporting Copies of Originals
438	Exporting Photo Versions
439	Exporting Audio and Video Versions
441	Exporting Projects, Folders, and Albums
442	Working with Export Presets
442	Viewing the Settings for an Export Preset
442	Creating an Export Preset
443	Modifying an Export Preset
443	Deleting an Export Preset
444	Setting Image Resolution When Exporting
446	Adjusting Images at Export
447	Adding a Watermark at Export
448	Applying IPTC Metadata and Keywords to Your Photos
448	Exporting Photos into Folders in the Finder
450	Renaming Photos at Export
454	Exporting Metadata in a Separate File
454	Exporting Using Plug-ins
455	Exporting by Dragging
456	Chapter 20: Creating Slideshow Presentations
456	An Overview of Slideshows
457	Playing Slideshows Using Slideshow Presets
457	An Overview of Slideshow Presets
458	Playing a Slideshow Using a Preset
459	Controlling a Slideshow
459	Arranging the Order of a Slideshow's Photos
460	Controls in the Slideshow Dialog
461	Creating Slideshow Presets
462	Modifying Slideshow Presets
463	Using Slideshow Presets to Play Slideshows with Music
464	Workflow for Creating a Multimedia Slideshow Presentation
465	Creating Slideshow Albums
467	Changing a Slideshow's Theme
468	About Editing Slideshow Transitions and Applying Effects
469	Modifying Settings Applied to the Entire Slideshow
469	An Overview of Modifying the Entire Slideshow
469	Setting the Aspect Ratio for the Slideshow
469	Looping the Slideshow and the Main Audio Track
470	Applying a Title to the Slideshow
471	Setting the Length of Time Slides Play
471	Choosing a Background Color for the Slideshow

471	Adding Borders Uniformly to Slides
472	Fitting the Slides to the Aspect Ratio
473	Adding Transitions Uniformly Between Slides
474	Adding Text to Slides
475	Modifying Individual Slides and Transitions
475	An Overview of Modifying Individual Slides and Transitions
475	Working with Video Slides
476	Applying a Photo Effect to Individual Slides
477	Modifying the Display Time for Individual Slides
478	Changing the Background Color for Individual Slides
478	Adding Image Borders to Individual Slides
479	Setting the Crop for Individual Slides
480	Applying a Ken Burns Effect to Individual Slides
481	Modifying Individual Transitions Between Slides
482	Adding Text to an Individual Slide
483	Adding Music and Audio to Slideshows
483	An Overview of Adding Music and Audio to Slideshows
485	Adding Audio Clips to Your Slideshow
487	Working with Audio Clips in the Secondary Audio Track
488	Adjusting the Volume Between the Main Audio Track and Secondary Audio Track
490	Syncing the Main Audio Track to the Slides in the Slideshow
490	Removing Audio Clips from Your Slideshow
491	Viewing Your Slideshows in Aperture
492	Sharing Your Slideshow Movies
493	Chapter 21: Creating Webpages
493	An Overview of Creating Webpages
494	Creating Web Galleries and Web Journals
494	Creating Webpage Albums
495	Creating Smart Web Page Albums
496	Creating Web Journal Albums
497	Viewing and Navigating Through Webpages
498	Choosing and Modifying Themes
499	Working with Web Gallery Pages
499	Arranging, Adding, and Deleting Photos in a Web Gallery
499	Changing Text on Web Gallery Pages
499	Hiding or Showing Photo Plate Numbers in Web Galleries
500	Working with Web Journal Pages
500	Adding, Arranging, and Deleting Web Journal Photos and Text
501	Adding Web Journal Pages
501	Choosing a Header Style for a Web Journal Page
501	Deleting Pages from a Web Journal
502	Reordering Pages in a Web Journal
502	Exporting Webpages as HTML Files
503	Working with Web Export Presets
503	Viewing the Settings for a Web Export Preset
504	Creating Web Export Presets
505	Modifying Web Export Presets
505	Deleting Web Export Presets
506	Adding Watermarks to Webpage Photos

507	Chapter 22: Using the Light Table
507	An Overview of the Light Table
508	Creating a Light Table Album
510	Placing and Viewing Photos in the Light Table
511	Moving and Resizing Photos in the Light Table
512	Aligning and Arranging Photos in the Light Table
514	Adjusting the Light Table View
515	Printing Light Table Arrangements
515	Deleting a Light Table Album
516	Chapter 23: Creating Books
516	An Overview of Creating Books
518	Planning Your Book
519	Creating a Book Album
521	Choosing a Theme
522	Viewing Pages
522	Navigating to Book Pages
522	Displaying Single Pages or Spreads
523	Resizing the Page View
523	Placing Photos in a Book
523	Placing Photos Manually
523	Placing Photos Automatically
524	Viewing Photos to Be Placed in a Book
525	Adding and Removing Pages
525	Adding Individual Pages to a Book
526	Automatically Creating New Pages
527	Adding New Pages to Hold a Selection of Photos
528	Adding New Pages Based on a Master Page
529	Adding a Photo Index to a Book
530	Removing Pages from a Book
530	Working with Pages
530	Creating a Cover for Your Book
531	Choosing a Master Page Layout
531	Copying Pages
531	Reordering Pages in a Book
532	Choosing a Background Image
532	Using Page Numbers in a Book
533	Rebuilding a Book
533	Working with Photos
533	Adding Photo Boxes to a Book Page
533	Changing How a Photo Fills a Photo Box
534	Changing the Aspect Ratio of a Photo Box
535	Arranging Photos on the Page
535	Copying, Pasting, Cutting, and Removing Photos from Photo Boxes
536	Stacking Photo Boxes in a Specific Order
536	Removing Photo Boxes
537	Changing the Look of Photos with Filters
537	Adding Map Boxes to a Book Page
541	Working with Text
541	Placing Text on the Page
542	Adding Text Boxes to a Page

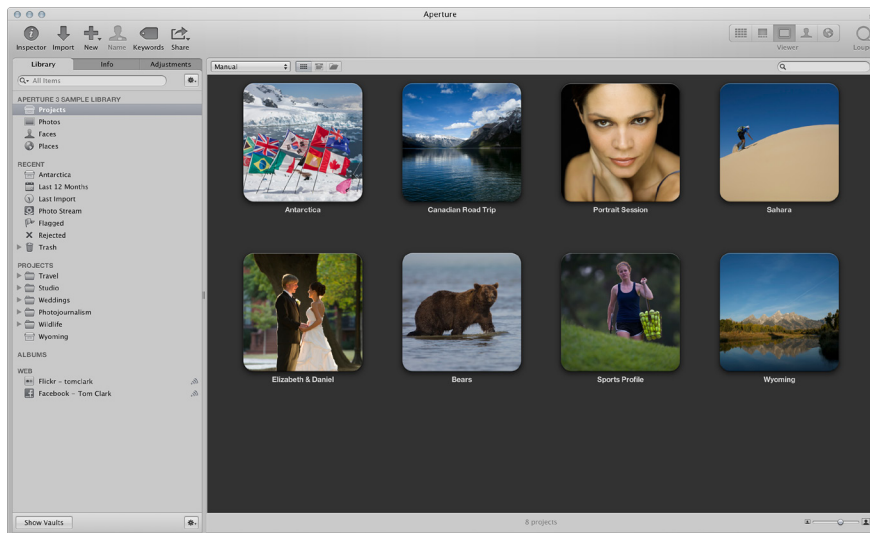
542	Adding Metadata Boxes to a Page
543	Hiding or Showing Photo Plate Numbers in Books
543	Choosing a Text Style
543	Making Font Changes in Books
544	Arranging Text on the Page
544	Changing the Number of Text Columns
544	Removing Text Boxes from a Page
544	Working with the Layout Options Inspector
546	Working with Master Pages
546	An Overview of Master Pages
546	Viewing Master Pages
547	Creating and Modifying Master Pages
548	Unifying and Splitting Master Pages
548	Updating Book Pages with Master Page Changes
549	Creating and Sharing Custom Themes
550	Copying a Book Album
551	Ordering Books from Third-Party Print Vendors Using Plug-ins
552	Chapter 24: Sharing Your Photos Online
552	An Overview of Sharing Your Photos Online
552	Using My Photo Stream
552	An Overview of My Photo Stream
554	Setting Up Your iCloud Account
555	Turning On My Photo Stream for an Aperture Library
556	Automatically Transferring Photos Between Aperture and Your Photo Stream
557	Manually Transferring Photos Between Aperture and Your Photo Stream
557	About Turning On My Photo Stream on More Than One Mac
558	About Uploading RAW Files to Your Photo Stream
559	Sharing Photo Streams
559	An Overview of Shared Photo Streams
559	Turning On Shared Photo Streams in Aperture
560	Creating a Shared Photo Stream
562	Adding, Removing, and Editing Photos in a Shared Photo Stream
563	Managing Subscribers to Your Shared Photo Streams
564	Subscribing to Shared Photo Streams
567	Emailing Photos
568	Publishing Photos to Flickr and Facebook
568	An Overview of Sharing Photos with Flickr and Facebook
569	Signing In to Flickr and Facebook
574	Creating Flickr and Facebook Albums
575	Viewing Flickr and Facebook Albums
576	Updating Your Flickr and Facebook Albums
578	Deleting Flickr and Facebook Albums
578	Changing Your Facebook Settings
579	Working with Multiple Flickr and Facebook Accounts
579	Disabling and Enabling Flickr and Facebook Accounts
581	Chapter 25: Backing Up Your Photos
581	An Overview of the Backup Workflow
582	Planning Your Backup System
583	Showing the Vault Pane

583	Creating Vaults
584	Updating Vaults
585	Disconnecting a Vault's Hard Disk Drive from Your System Temporarily
585	Reconnecting a Vault's Hard Disk Drive to Your System
586	Deleting a Vault Permanently
586	Restoring Your Aperture System
587	Repairing and Rebuilding Your Aperture Library
588	Chapter 26: Customizing the Aperture Workspace
588	Changing Main Window Layouts
590	Setting Aperture Preferences
590	An Overview of Aperture Preferences
591	Opening Aperture Preferences
591	General Preferences
592	Appearance Preferences
593	Import Preferences
594	Export Preferences
595	Labels Preferences
595	Previews Preferences
596	Photo Stream Preferences
596	Web Preferences
597	Advanced Preferences
598	Customizing the Toolbar
598	Hiding and Showing the Toolbar
598	Customizing Items in the Toolbar
599	Using Gestures with Aperture
601	Customizing Keyboard Shortcuts
601	An Overview of Customizing Keyboard Shortcuts
602	Choosing a Command Set
603	Viewing Keyboard Shortcuts by Group
603	Searching for Commands
604	Filtering the View by Modifier Keys
604	Viewing Key and Command Details
605	Assigning Keyboard Shortcuts
606	Importing and Exporting Command Sets
607	Glossary

Aperture Basics

1

What Is Aperture?



Aperture is a powerful, easy-to-use digital photo management system for organizing, adjusting, archiving, and presenting high-quality photographic images.

In Aperture, you can:

- Work directly with your iPhoto library without having to import your iPhoto photos.
- Import digital photos, audio files, and HD video files from cameras, card readers, and hard disk drives in high-quality formats such as JPEG, TIFF, and RAW.
- Edit and adjust digital photos using intuitive image-processing tools for retouching, skin smoothing, red-eye removal, color balance, exposure correction, and more.
- Work with your photos in RAW format, from capture through adjustment to final output, preserving the highest-quality images throughout your workflow.
- Store photos, audio files, and video files wherever you want—in the Aperture library, on multiple hard disks, or on other storage media.
- Work with multiple Aperture libraries, with the ability to switch from library to library without closing Aperture.
- Catalog and manage thousands of photos and video files using flexible organizational tools, comprehensive metadata support, and powerful search tools that let you find files instantly in multiple locations, including hard disks, offline volumes, CDs, and DVDs.
- Export any part of your library, make changes to it on a second Aperture system, and then merge it back into the library of your primary Aperture system.
- Process your photos nondestructively. Aperture protects your original image files and uses built-in safeguards to help ensure that you don't accidentally overwrite or modify originals.

- Automatically back up copies of your image files to designated storage areas, called *vaults*, located on external hard disks.
- Print or publish your photos and albums in any of numerous formats and to multiple locations. Working directly with RAW photos, you can create color-accurate prints, custom contact sheets, and unique bound books.
- Share your photos electronically, publishing them to Facebook, Flickr, and iCloud Photo Stream. You can also create slideshow presentations for clients and friends, attach photos to email, and create webpages to display your photos.

Aperture Workflow Overview

The basic process of managing photos in Aperture is described below. You don't have to do every step, and you might do other tasks that aren't listed here.

Using Your iPhoto Library with Aperture

The first time you open Aperture, the Welcome to Aperture screen invites you to open your iPhoto library. Aperture opens your iPhoto library, and you can begin working with your photos instantly. It's that simple. You can also switch to your iPhoto library by choosing File > Switch to Library.

Important: Aperture can only open iPhoto libraries upgraded to iPhoto 9.3 or later. To upgrade your iPhoto library, open it in iPhoto 9.3 or later.

For more information about switching libraries in Aperture, see [Viewing Other Libraries](#) on page 40.

Importing Photos into Aperture

To use Aperture, you first import your photos. You can import digital photos directly from your camera or a card reader and from hard disks or other storage devices where you've archived digital files.

Aperture automatically imports any audio attachments associated with your image files, provided that the image files and their audio attachments have the same filename. In addition to importing photos into Aperture, you can also import QuickTime-compatible audio and video files.

Creating Projects

As you work with Aperture, you create projects to hold your photos. Projects are similar to events in iPhoto. A project can hold dozens, hundreds, or even thousands of photos. When you need to further subdivide and organize photos in a project, you can create albums. As your portfolio increases and you create more and more projects, you can organize your work into hierarchies of folders, projects, and albums.

Viewing and Organizing Your Photos

To work with your photos, you select a project in the Library inspector, and the project's photos appear in the Browser. You use the Browser to review, organize, and select photos. When you select a thumbnail image in the Browser, the photo appears in the Viewer. If you want to work with your photos in detail, you can view them in Full Screen view.

Aperture also provides several tools to help you organize a large portfolio of photos. You can compare high-resolution photos side by side, group similar photos in stacks, rate photos, identify people in your photos using Faces, and apply location information to your photos using Places. You can also apply keywords and other metadata to your photos to make them easier to find.

Adjusting Your Images

You can enhance your photos using a set of powerful, nondestructive adjustments such as Crop, Straighten, Exposure, White Balance, Levels, Curves, Highlights & Shadows, Vignette, and more. In addition, you can use brushes to apply or remove adjustments selectively, affecting only certain parts of an image.

To streamline your workflow, you can save adjustment settings as presets (collections of saved settings) and apply a combination of image adjustments to one or more photos in a single step.

Sharing Your Photos

When it's time to show your work to others, Aperture provides many options for distributing and sharing your photos:

- Send your photos to Flickr and Facebook.
- Present your photos in multimedia slideshows.
- Create premium-quality photo books.
- Print high-resolution photos.
- Export your photos in a variety of file formats.
- Email your photos directly from Aperture.
- Publish your photos in web galleries and web journals as HTML that you can upload to a web server.
- Use Photo Stream to make your photos available on all your devices—including iOS devices, Mac computers, PCs, and Apple TV—as well as share photos with friends and family members who have iCloud accounts.

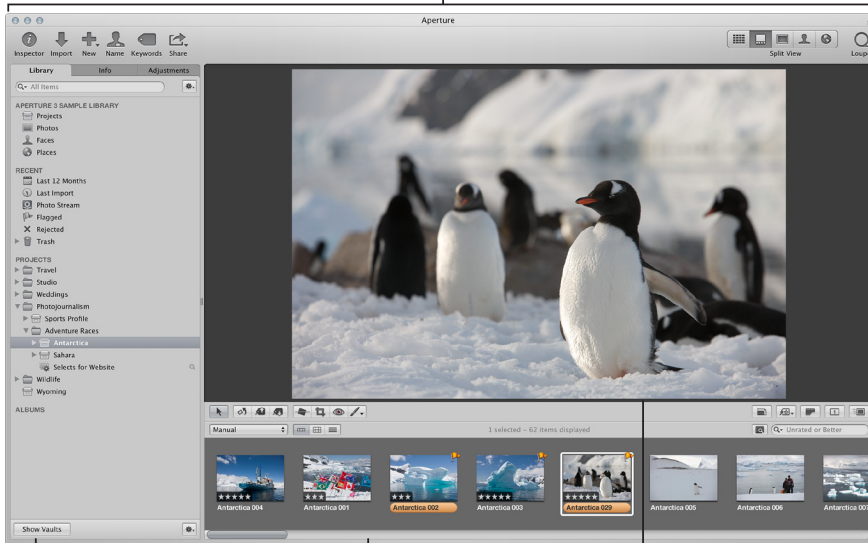
Backing Up Your Work

After you import photos from your camera and erase memory cards in preparation for the next shoot, Aperture stores a single copy of each photo on your hard disk. It's important to make backup copies of these photos to safeguard your portfolio. You can set Aperture to back up your managed images (images that are stored in the Aperture library) and all information associated with them, such as keywords and image adjustment settings, on vaults located on hard disk drives. You can also set Aperture to automatically back up your photos during import.

Aperture Interface Overview

Here are the main areas of the Aperture window:

Toolbar: Perform common tasks and select a workspace view.



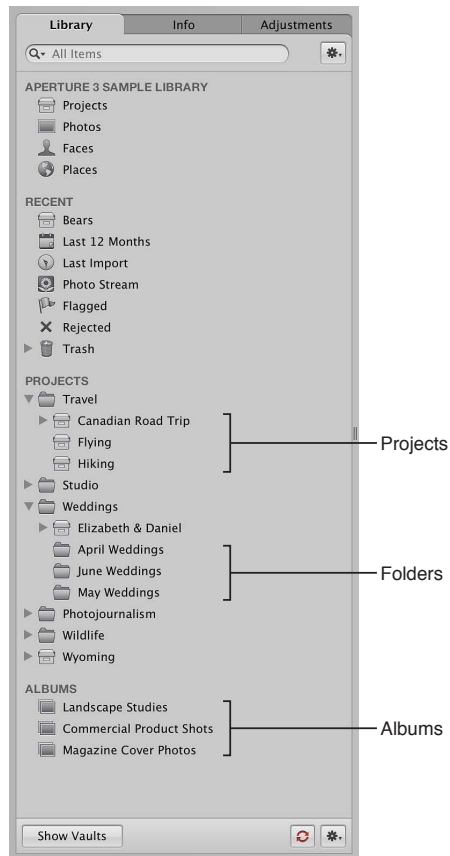
Inspectors: Access the library, view photo information, and adjust photos.

Browser: View thumbnails of photos in the item selected in the Library inspector.

Viewer: View the photo or photos selected in the Browser.

Organizing Photos Using the Library Inspector

All your imported photos are available in the Library inspector, one of three inspectors in the Inspector pane on the left side of the Aperture main window. The Library inspector holds containers—projects, folders, and albums—you can use to organize your photos.



The Library inspector also provides a number of ways to view items in the library. For example, you can select Projects at the top of the Library inspector to view your photos organized by project, or Places to view the locations of all the photos in the library. For more information, see [An Overview of the Library Inspector](#) on page 31.

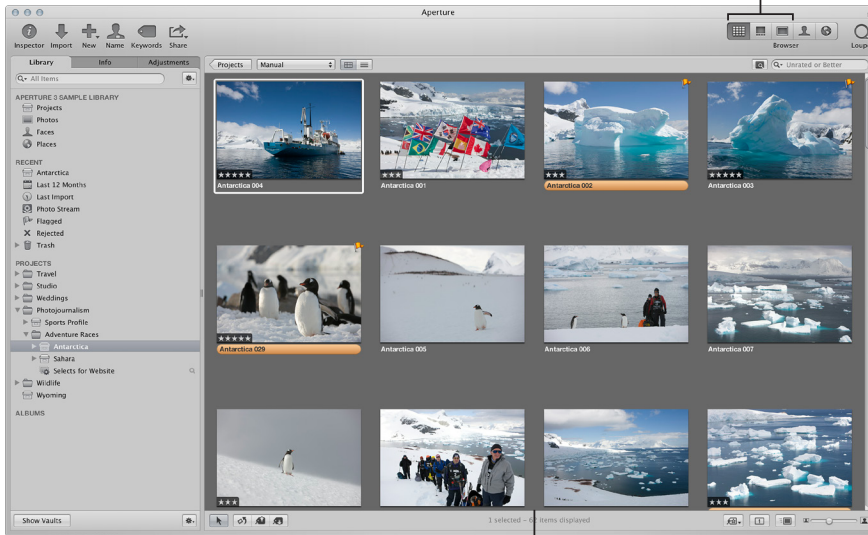
When you select a folder, a project, or an album in the Library inspector, the images appear in the Browser and Viewer to the right.

Displaying Photos in the Browser and Viewer

You can arrange the Browser and Viewer to suit your work style, showing either one by itself or both at once. To change the main window layout, click a layout button at the right side of the toolbar.

The Browser layout displays a grid of thumbnail images.

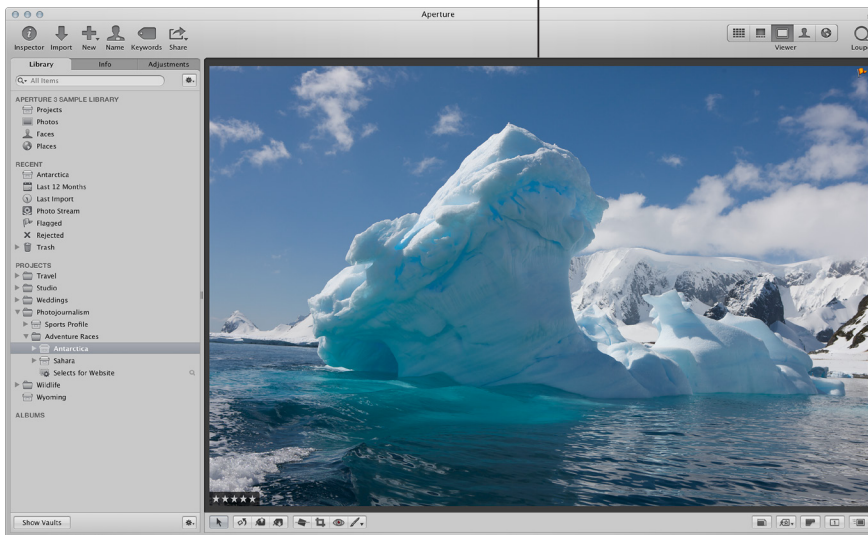
Layout buttons: Click a button to select a main window layout.



Browser layout: The Browser fills the workspace and displays a grid of thumbnail images.

When you double-click a thumbnail image in the Browser (or click the Viewer button in the toolbar), Aperture switches to the Viewer layout, displaying the selected photo in a larger format. You can use the Viewer to examine a photo at full size or compare multiple photos side by side.

Viewer layout: The Viewer fills the workspace and displays your photo selection.



Tool strip: Use these tools to adjust and work with your photos.

You can use the tools in the tool strip below the Viewer to adjust and manipulate your photos. For more information, see [Working with Adjustment Tools in the Tool Strip](#) on page 269.

To display the Viewer and Browser at the same time, click the Split View button at the right side of the toolbar.



Split View layout: The Viewer and Browser appear together.

Displaying Photos in Full Screen View

You can also view your photos in Full Screen view, dramatically projecting them onto a solid background for detailed adjustments and comparisons. Full Screen view offers different display layouts that let you view large-format versions of selected photos, view thumbnails, or view photos by project. For more information see [An Overview of Full Screen View](#) on page 125.



Basic Components of Aperture

An Overview of the Basic Components of Aperture

Aperture uses the following basic components in your photo management system:

- *Originals*: The original image, video, and audio files imported from your digital camera, memory card, computer, or external storage media.
- *Versions*: Files derived from the originals and used to display your photos with any changes you've made, including image adjustments or changes to metadata.
- *Projects*: The basic containers used in Aperture to organize photos. Projects can hold versions, folders, and albums.
- *Albums*: Containers that hold versions. You can create albums to organize photos within projects or outside of them.
- *Folders*: Containers used to organize projects and albums.
- *Library*: The Aperture database that records and tracks your original image, video, and audio files and all of their corresponding versions. You can also create multiple Aperture library files in different locations. The library tracks all the information about the projects, folders, and albums you create to organize your media.
- *Managed and referenced images*: Originals stored in the Aperture library are called *managed images* because Aperture manages the location of the image files in its database. Managed image files are physically located in the Aperture Library file. You can also import photos into Aperture without storing the original image files in the library. Image files that are not stored in the library are called *referenced images*. Aperture links to referenced image files in their current locations on your hard disk, without placing them in the Aperture Library file.
- *Aperture Trash*: Container that holds items you delete in Aperture. You can retrieve items from the Aperture Trash until it is emptied.
- *Vaults*: Containers that each hold a backup of the library and all its photos and information.

The next sections describe each of these elements and how you work with them in Aperture.

What Are Originals?

Originals are the original digital RAW, GIF, JPEG, TIFF, DNG, PNG, audio, or video files that are imported into Aperture from digital cameras, memory cards, computers, CDs, DVDs, or storage devices such as external hard disk drives. Aperture never changes the original, so you always have originals to work from.

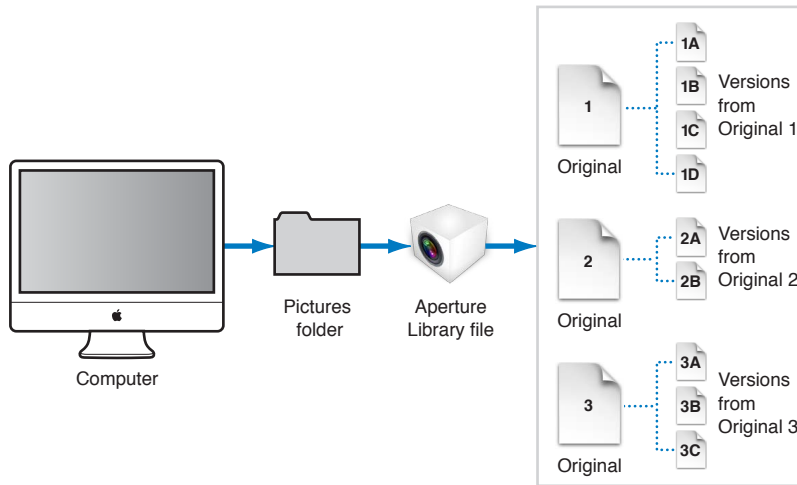
Important: Originals—especially RAW files—tend to be quite large. Projects consisting of several thousand originals require high-capacity hard disks.

For information about importing originals, see [An Overview of Importing Photos](#) on page 50.

What Are Versions?

Once you have originals on your hard disk, you can review and make adjustments to your images. For example, you can change the exposure, contrast, or saturation, or add information to an image, such as the photographer's name, the project, and the location. To work with photos, Aperture creates a *version* of each original that includes your adjustments and embedded information, leaving the original unchanged. A version refers to the original on your hard disk, but it is not the original itself. Versions store only the thumbnail image, adjustments, and embedded information. A full image file is not created until you are ready to print or export, saving valuable hard disk storage.

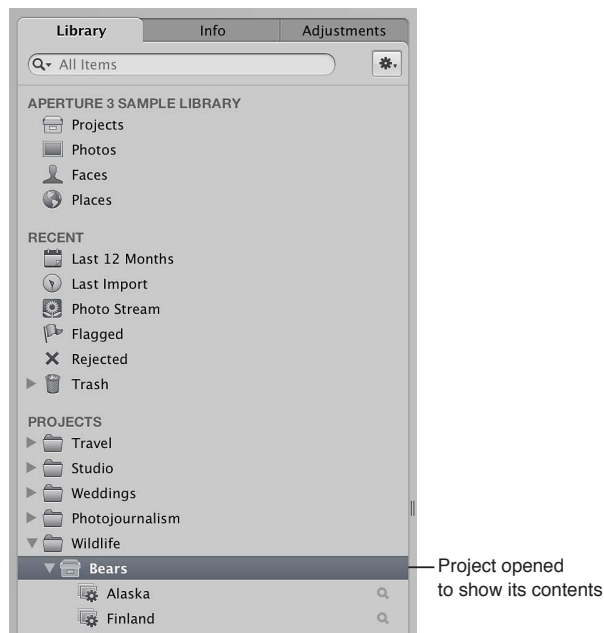
In many cases, your workflow may call for different renderings of the same photo. For example, a client may request a color as well as a black-and-white version of the same head shot. You can create multiple versions of the same photo in Aperture.



When you create a version, Aperture reads the original image file on disk and displays it on the screen. As you make adjustments or add information to the image, Aperture displays the version with your changes, but the original image file is never changed.

What Are Projects?

You organize your originals and versions using *projects* which are similar to events in iPhoto. When you import photos into Aperture, you assign them to a project. You can create as many projects as you like, up to the limitations of your disk space. For example, you can create a new project for each of your shoots. Or, if you do several shoots of the same subject, you can create a project that encompasses all of the shoots.



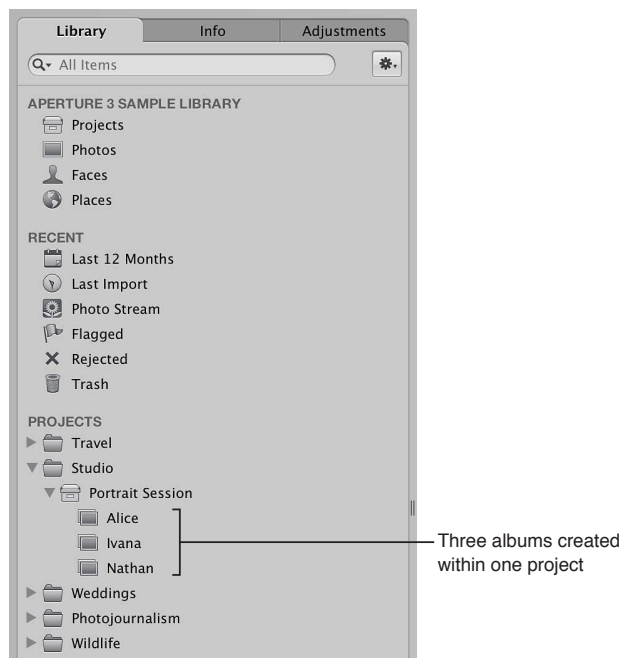
You can have multiple projects open at the same time, each represented by its own icon in the Library inspector and tab in the Browser. For more information, see [Working with Two or More Browsers Open](#) on page 89.

What Are Albums?

An album is a container in the Aperture library used to group photo versions. You use albums to organize photos in the library, making your selections of versions easier to manage. You can create albums at the library level or within a project.

You use albums created at the library level to organize versions from multiple projects. For example, you can create an album to consolidate your favorite photos, or *selects*, from multiple projects. You can then publish this collection of selects on your website or export the album's contents for review by a prospective client.

You can also create albums within projects to help you organize your photos into relevant groups. For example, photos in your Soccer project can be divided into three albums: Game 1, Game 2, and Game 3.

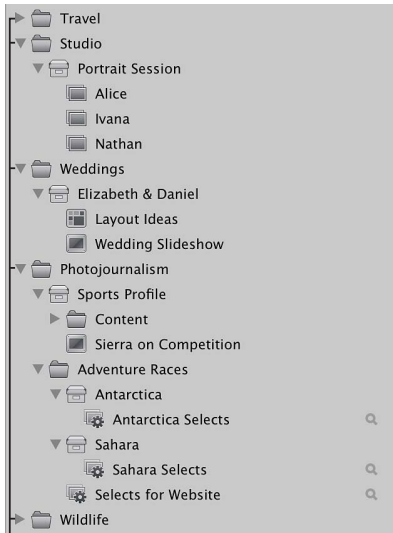


You can also place versions from other projects into an album that resides within a project.

In addition to a standard album that you drag photos into, you can create Smart Albums whose contents are controlled by criteria you specify. When you change a Smart Album's search criteria, the contents of the Smart Album change automatically. For more information, see [An Overview of Smart Albums](#) on page 255.

What Are Folders?

In Aperture, you use folders to organize projects and albums. For example, you can import photos into projects and then place the projects in folders based on photo type or location. If you shoot multiple projects for the same client, you can create a folder that holds the client's projects.



These folders organize projects based on type.

Folders contain only albums, projects, and other folders. They don't contain originals or versions.

What Is the Library?

The Aperture library tracks every project, album, folder, original, and version, no matter whether the photos, video files, and audio files are stored in the Aperture Library file or in other hard disk locations. Aperture automatically creates a library file in the Pictures folder the first time you open Aperture. You can import media into the library or have Aperture access the files in other locations. The library tracks all your image, video, and audio files and the information recorded about them, as well as information about where backup files are stored.

You can move the library file to a different folder or hard disk. You specify where the library is located using the Preferences window. For information about working with multiple library files in Aperture, see [An Overview of Library Files](#) on page 39.

You can also transfer libraries from other Aperture systems and merge them with the library on your local Aperture system. All links between versions and their originals are maintained when projects are transferred. This is particularly useful if you use a portable computer when on location or away from your studio, and a workstation at your studio. For more information about merging libraries, see [Merging Libraries](#) on page 41.

When you back up your originals to vaults on external hard disks, those actions are tracked by the Aperture library as well. For more information about backing up your library, see [An Overview of the Backup Workflow](#) on page 581.

What Are Managed Images and Referenced Images?

Aperture lets you choose how you organize your photos on disk. You can store your photos in the Aperture library, or you can import photos by simply linking to the image files in their current locations, without placing them in the library.

Images whose originals are stored in the Aperture library are called *managed images*. Managed images are always accessible and are easily backed up to vaults, to name just two benefits.

Imported photos whose originals haven't been placed in the library are called *referenced images*. Using referenced images provides a number of substantial benefits to your photography workflow. For example, you can incorporate your existing portfolio of photos into Aperture without changing the current location of the files. Importing images by reference does not result in a duplication of your image files in the Aperture library, thus saving hard disk space. You can also connect and disconnect hard disks holding your referenced images' originals as you need them. This allows you to keep originals for less-used photos offline or to make specific types of photos available for editing or adjustments as needed. Using referenced images lets you build a flexible image management system customized to your work style.

You specify whether a photo will be a managed image or a referenced image when you import it. When importing photos, you can:

- Specify that originals be stored in the Aperture library.
- Import photos as referenced images, so that their originals remain in their current locations.
- Move or copy image files to a new location. For example, you might decide to have a certain group of referenced image files, such as photos from 2011, placed in one hard disk location, and another group, such as photos from 2012, placed in a different hard disk location.

You can work with referenced images—creating versions, making adjustments, cropping, and adding metadata—just as you can with managed images. Versions that you create from a referenced image are stored in the library. In order for you to make adjustments to a version from a referenced image, the referenced image's original must be available on your hard disk or other storage device. For example, if you delete a referenced image's original in the Finder, Aperture no longer has access to the original and so no longer allows you to change your versions or create new ones.

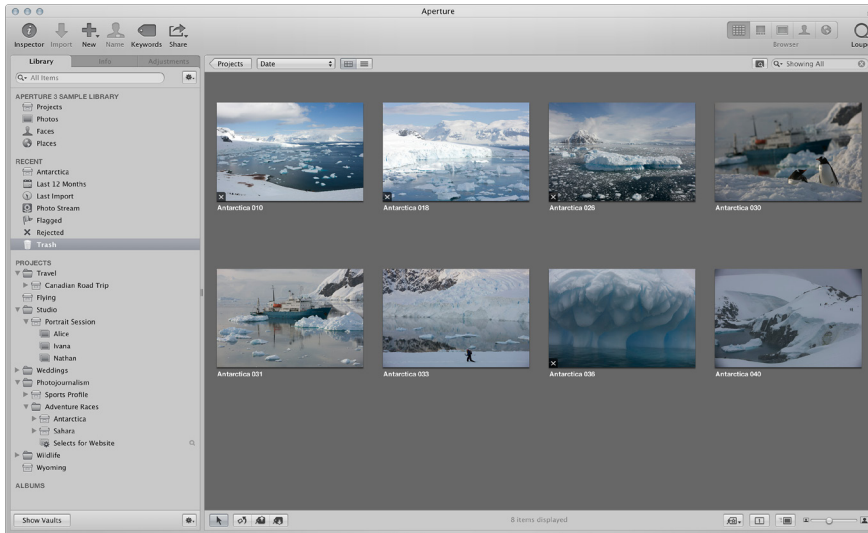
To help you identify referenced images, Aperture marks them with a badge overlay that you can display or hide. When a referenced image's original is missing or offline, its badge changes to show that the image is not accessible. For example, if you disconnect a hard disk that holds originals for many referenced images, Aperture automatically marks the referenced images in the Browser and Viewer as offline. If you reconnect the hard disk or other storage device later, Aperture accesses the originals automatically and you can work with and change their versions again.

You can also relocate originals, moving them out of the library or moving referenced originals to different hard disk locations. If needed, you can also move referenced originals into the Aperture library by choosing the Consolidate Originals command in the File menu.

You can search for photos based on whether they are managed images, referenced images, or online or offline images. Aperture also provides robust file management tools that let you quickly determine which images are offline and easily reconnect images that have been moved to different volumes.

What Is the Aperture Trash?

All items deleted in Aperture, including projects, albums, folders, versions, and originals, are placed in the Aperture Trash in the Library inspector. You can retrieve any item from the Aperture Trash until you empty it. For more information, see [Working with the Aperture Trash](#) on page 38.



What Is a Vault?

To ensure that you have backup copies of your photos, you create a *vault* to hold the backup files. A vault is a container that holds an exact copy of the library. This includes projects, originals, and any versions you've created. You can easily create and update a vault to back up the library. It's a good idea to create multiple vaults on multiple external hard disk drives to safeguard copies of the library.

You can have as many vaults as you deem necessary. Creating more than one vault is useful if you work at different locations; you can always keep one vault on an external drive onsite and another one offsite. All vaults and backup files are tracked by the library so that even if you disconnect the external hard drive that contains a vault, Aperture can access it the next time you reconnect the drive and update the vault.

All the originals and versions for managed images are backed up, as well as all metadata, previews, and adjustment information associated with managed images. The versions, previews, metadata, and adjustment information associated with referenced originals are also backed up in the vault. Referenced originals are not backed up in the vault with the library.

Important: Because the originals for referenced images are stored outside of the library, you must manage the backup and archiving of them yourself.

Opening Aperture for the First Time

The first time you open Aperture, a Welcome to Aperture screen presents you with two options, provided you have an iPhoto library:

- Update and begin using your existing iPhoto library.
- Start with a new, empty Aperture library and begin importing photos.

Important: Aperture can only open iPhoto libraries upgraded to iPhoto 9.3 or later. To upgrade your iPhoto library, open it in iPhoto 9.3 or later.

To open Aperture for the first time

- 1 In the Applications folder in the Finder, double-click the Aperture icon.

The Welcome to Aperture screen appears.



- 2 Do one of the following:

- *To update your iPhoto library and begin working with it in Aperture:* Click the Update iPhoto button.

After iPhoto is updated to version 9.3, open your iPhoto library so that it is upgraded to version 9.3 as well. When the upgrade is complete, close iPhoto and open Aperture. The contents of your iPhoto library appear in the Library inspector in Aperture. For more information, see [An Overview of the Library Inspector](#) on page 31.

- *To open a new, empty Aperture library:* Click the Create New button.

Aperture opens a new, empty Aperture library, and you can begin importing photos immediately. For more information, see [An Overview of Importing Photos](#) on page 50.

Tip: To set Aperture to use the keyboard shortcuts you're familiar with using in iPhoto, choose Aperture > Commands > iPhoto. For more information, see [An Overview of Customizing Keyboard Shortcuts](#) on page 601.

Working with the Aperture Library

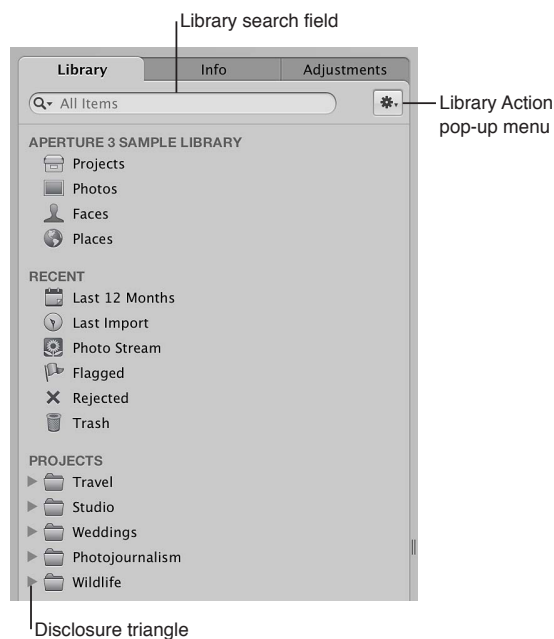
2

Organizing Items in the Library Inspector

An Overview of the Library Inspector

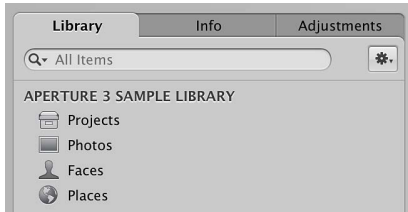
The Library inspector provides access to items tracked by the Aperture library, such as projects and albums, and different views of the contents of the library. For example, you can select Faces in the Library inspector to view your photos grouped by the people in them, or Places to view your photos grouped by where they were taken.

There are several controls you use to work with items in the Library inspector.



- *Library search field*: Enter text to search for items located in the Library inspector.
- *Disclosure triangle*: Click to see all items within a project, a folder, or the Trash.
- *Library Action pop-up menu*: Add the selected item to a list of favorites or remove it from the favorites list. You can also choose to export items selected in the Library inspector or maintain previews. For more information about previews, see [An Overview of Preview Images](#) on page 118.

You can select items at the top of the Library inspector to view the contents of your library organized in different ways.



- **Projects:** Select this item to have all the projects in the library appear in Projects view in place of the Browser and Viewer. Each project is represented by a single thumbnail. You can position the pointer over a project thumbnail and drag to quickly skim the photos in the project. When you hold down the Control key and click a project's thumbnail, a shortcut menu appears that allows you to create a new project, display information about the project, delete the project, import files into the project, export the project as a library, set the currently displayed image as the key photo that represents the project, empty the Aperture Trash, or play each photo in the project in a slideshow. Double-click the project's thumbnail to see the photos in the Browser.

For more information about Projects view, see [Switching to Projects View](#) on page 43.

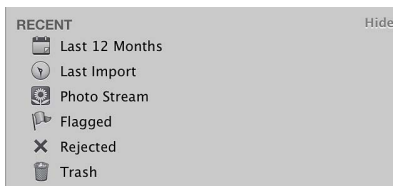
- **Photos:** Select this item to see all photos, video clips, and audio clips in the library. All media in the library is displayed in the Browser as thumbnails. Select a thumbnail in the Browser to view it or listen to it in the Viewer.
- **Faces:** Select this item to view people identified in photos and tracked by Aperture in the library. Click the Info button on a snapshot to show the Info HUD. The Info HUD provides the name of the person, how many photos in the library contain the person, when the photos were shot, and the person's full name and email address (if you entered them). Click the View Photos button in the HUD to view all the photos the person appears in and any photos the person might appear in.

For more information about working with Faces, see [An Overview of Faces](#) on page 199.

- **Places:** Select this item to view a map that shows the locations assigned to photos in the library.

For more information about working with Places, see [An Overview of Places](#) on page 208.

You can select items in the Recent area of the Library inspector to view photos you've imported recently, photos in your iCloud Photo Stream, flagged photos, rejected photos, or photos you've placed in the Aperture Trash.



- **Last 12 Months:** Select this item to see all photos, video clips, and audio clips imported into Aperture during the last 12 months. Select a thumbnail in the Browser to view it or listen to it in the Viewer.
- **Last Import:** Select this item to see all photos, video clips, and audio clips imported into Aperture during the last import session. Select a thumbnail in the Browser to view it or listen to it in the Viewer.

- *Flagged*: Select this item to see all the photos, video clips, and audio clips in the library that have been flagged. The thumbnails for all flagged media appear in the Browser. Select a thumbnail in the Browser to view it or listen to it in the Viewer.
- *Photo Stream*: Select this item to see all the photos that have been uploaded to Photo Stream from your iOS 5 devices and your Aperture library. The thumbnails for all Photo Stream images appear in the Browser. Select a thumbnail in the Browser to view it in the Viewer.

For more information about working with Photo Stream, see [An Overview of My Photo Stream](#) on page 552.

- *Trash*: Select this item to see all the photos, video clips, and audio clips in the library that have been deleted. The thumbnails for all deleted media appear in the Browser. Select a thumbnail in the Browser to view it or listen to it in the Viewer. Click the disclosure triangle next to the Trash to view any items that have been deleted in the Library inspector. Select an item in the Trash to view its contents.

Note: If there is no disclosure triangle next to the Aperture Trash, no items in the Library inspector have been deleted since the last time the Trash was emptied.

For more information about the Trash, see [Working with the Aperture Trash](#) on page 38.

Using More Than One Album in a Project

For some projects, it makes sense to use several albums within the project. You can use albums in several ways, including:

- *Albums as occasions*: Break a project into a series of albums according to specific occasions. For example, a wedding project can be divided into albums for each of the following occasions: Preparation, Ceremony, and Reception.
- *Albums as days*: Break a project that spans multiple days into albums for individual days. For example, a project consisting of a two-week trip to Japan can be divided into 14 individual albums corresponding to each day.
- *Albums for specific subjects*: Break a project consisting of multiple photographed subjects into individual albums dedicated to each subject. For example, a studio photographer may shoot three models for a single project. The photographer can create an album for each model. Or you might create albums to hold specific photo types, such as candid shots or close-ups.

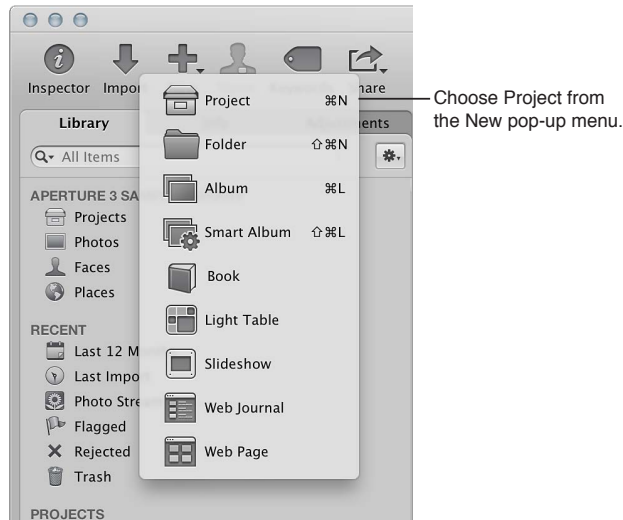
Creating and Naming Projects

You can create projects at any time, although typically you create them when you import photos. When you import photos into the Aperture library and no project is selected, you are asked to create a new one. For more information about importing files and creating projects automatically, see [An Overview of Importing Photos](#) on page 50.

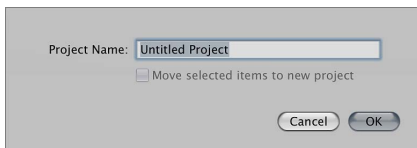
To create a new project

1 Do one of the following:

- Choose File > New > Project (or press Command-N).
- Choose Project from the New pop-up menu in the toolbar.



2 In the dialog that appears, enter a name for the project in the Project Name field.



3 Do either of the following:

- *To move the photo selection into a new project:* Select the “Move selected items to new project” checkbox.
- *To create a new, empty project:* Do not select the “Move selected items to new project” checkbox.

4 Click OK.

The new project appears in the Library inspector. If the “Move selected items to new project” checkbox is selected, the selected photos appear in the Browser and Viewer.

Opening and Closing Items in the Library Inspector

To work with photos in Aperture, you first select an item in the Library inspector to open it in the Browser. You can open and work on more than one item at a time. When you open multiple items from the Library inspector, you can have each item appear in the Browser with its own tab or have the contents of all items appear in a single Browser. You can click an item’s Browser tab to bring it to the front. You can also open an item in its own pane to view the contents of two items in the Browser side by side. When you quit and reopen Aperture, all items that were open at the end of your last session open automatically.

To open an item in the Library inspector

- Select the item in the Library inspector.



Select a project to view its photos in the Browser.

All photos in the project appear in the Browser.

To open additional items in the Browser, each with its own tab

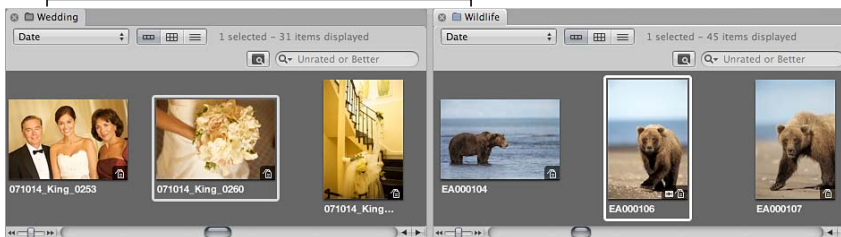
- Command-Option-click an item in the Library inspector.

The newly opened item appears in the Browser with its own tab, in front of any other open items.

To open another item in its own pane

- Option-click an item in the Library inspector.

Library items are identified by their tabs.



The newly opened item appears in the Browser with its own tab and in its own pane.

To switch among several open items

- In the Browser, click a project's tab.

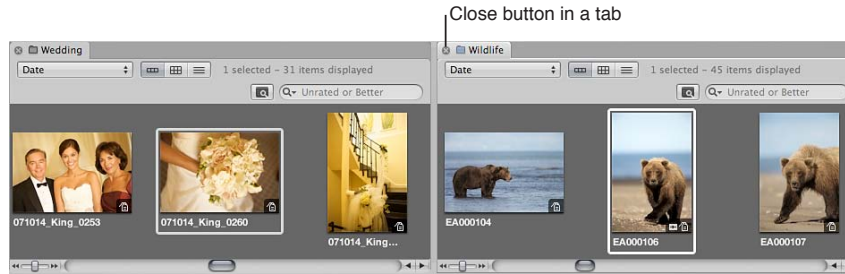
To open multiple items in the same Browser

- Command-click multiple items in the Library inspector.

The contents of each item selected in the Library inspector appear in the same Browser.

To close an item in the Browser

- 1 Click the item's tab to bring it to the front.
- 2 Click the tab's close button.



Arranging Items in the Library Inspector

Typically, you create a new Aperture project for each photography project or job that you work on, regardless of its duration. For example, if you're working on a documentary in Thailand, you would create a project for it. If you're also shooting the temples in the interior of the country, that could be a second, separate project. Both projects could conceivably refer to some of the same photos, but they are completely independent structures, each with its own versions and albums.

Very large photography projects, such as documentaries and sporting events, often consist of large numbers of photos. You can always break one project into several should the need arise.

As your library grows, you'll need to reorganize your library's structure to fit your particular workflow.

To move an item in the Library inspector

- Select an item in the Library inspector, then drag it to a new location.



A black bar indicates where the item will be placed.

To move multiple items in the Library inspector

Do one of the following:

- Shift-click adjacent items, then drag them to a new location.
- Command-click nonadjacent items, then drag them to a new location.

To automatically arrange items in the Library inspector

Do one of the following:

- Control-click in the Library inspector, then choose Keep Arranged By > Kind from the shortcut menu to group similar items together.
- Control-click in the Library inspector, then choose Keep Arranged By > Name from the shortcut menu to sort items alphabetically.

Creating and Showing Favorite Items

If you have certain projects that you work on most often or projects that you work on at the same time, you can make them *favorites* to quickly view them all simultaneously.

To make a project, a folder, or an album a favorite

- In the Library inspector, select a project, folder, or album, then choose Add to Favorites from the Library Action pop-up menu (with a gear icon).

To view a favorite project, folder, or album

- In the Library inspector, choose Favorite Items from the search field pop-up menu at the top-left corner.

Only the items in the library that have been chosen as favorites are shown. All other items in the Library inspector are removed from view.

To remove a project, a folder, or an album as a favorite

- In the Library inspector, select a project, folder, or album, then choose Remove From Favorites from the Library Action pop-up menu (with a gear icon).

To view recently selected items in the Library inspector

- In the Library inspector, choose Recent Items from the search field pop-up menu at the top-left corner.

To view all items in the Library inspector again

- In the Library inspector, choose All Items from the search field pop-up menu.

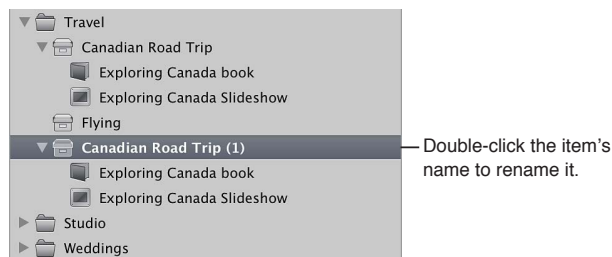
Duplicating a Project Structure

If you routinely use the same project structure populated with the same types of albums and folders, you can duplicate the structure of an existing project and create a new, empty project with the same arrangement of albums and folders. If the project you're duplicating has Smart Albums, the settings for those Smart Albums are duplicated as well.

For more information, see [An Overview of Smart Albums](#) on page 255.

To duplicate a project structure

- 1 In the Library inspector, select the project whose structure you want to copy.
- 2 Choose File > Duplicate Project Structure.



The project and all of its subordinate items, such as albums, folders, and Smart Albums, are duplicated along with their names. However, the duplicated project contains no photos, audio clips, or video clips.

- 3 Double-click the name of each duplicated item in the new project to give it a new name.

Merging Projects

If you created multiple projects and then later decide that the content spread among the projects would be better suited to a single project, you can select the projects in the Library inspector and merge them into a single project. When you merge projects, the projects are consolidated into the topmost selected project in the Library inspector.

To merge projects

- 1 In the Library inspector, select the projects you want to merge by Shift-clicking adjacent projects or Command-clicking nonadjacent projects.
- 2 Choose File > Merge Projects.

A dialog appears, indicating which project the selected projects will be merged into.

- 3 Click Merge.

The content in the selected projects is merged into the topmost selected project in the Library inspector.

Working with the Aperture Trash

All items deleted in Aperture, including projects, albums, folders, versions, and originals, are placed in the Aperture Trash in the Library inspector. You can retrieve any item from the Trash until you empty it.

To delete an original and all its versions from a project

- Select a photo, a video clip, or an audio clip, then choose File > Delete Original Image and All Versions.

The original and all versions are moved to the Trash.

To delete only a version from an album

- Select a photo, a video clip, or an audio clip, then choose Photos > Remove From Album (or press Delete).

The version is deleted. The original and its other versions are not deleted.

To delete projects and folders

When you delete an item from the Library inspector, the contents of the item are deleted with it.

Note: If you delete a project, the originals contained in the project are also deleted.

- 1 Select a project or folder.
- 2 Do one of the following:
 - Choose File > Delete [*item*] (or press Command-Delete).
 - Drag the item to the Aperture Trash.

The selected item is moved to the Trash in the Library inspector.

To move an item out of the Aperture Trash

If you delete an item in the Library inspector by mistake, it's easy to fix.

Do one of the following:

- Drag the item out of the Aperture Trash.
- Control-click the item in the Aperture Trash, then choose Put Back from the shortcut menu.

The selected item is moved back to its original position in the Library inspector.

To empty the Aperture Trash

After you've reviewed the contents of the Aperture Trash and are confident that you no longer need the items within it, you can empty the Trash. When you empty the Aperture Trash, all of its contents are placed in the Finder Trash.

1 Do one of the following:

- Choose Aperture > Empty Aperture Trash (or press Command-Shift-Delete).
- Control-click the Aperture Trash, then choose Empty Aperture Trash from the shortcut menu.

A dialog appears, warning you that the items will be removed from the Aperture Trash permanently.

2 Click Delete.

WARNING: This action cannot be undone, but you can retrieve the originals from the Finder Trash until you empty it.

Working with Library Files

An Overview of Library Files

Aperture exports projects, albums, and folders as a library file. You can transfer the library file from one Aperture system to another and then merge the transferred library file into the library file on that system. All links between versions and their originals are maintained when library items are transferred. This is particularly useful if you use a portable computer when on location or away from your studio, and a desktop computer at your studio. Any work done in the field can be exported from your portable computer as a library file and then merged with the library file on the desktop computer at your studio.

You can work with as many libraries as necessary—including iPhoto libraries—and switch between them without having to quit and reopen Aperture. If your workflow calls for several unique libraries, you can switch between them on the fly. You can also check the contents of a library prior to importing it into the library that's currently open.

When the library file becomes large and requires more disk space than is available in its current location, you can move it to a hard disk with greater storage capacity. To change the location of the library, you move the library file to a new location and then double-click it to open it in Aperture.

Tip: To maximize performance, place the library file on an internal hard disk.

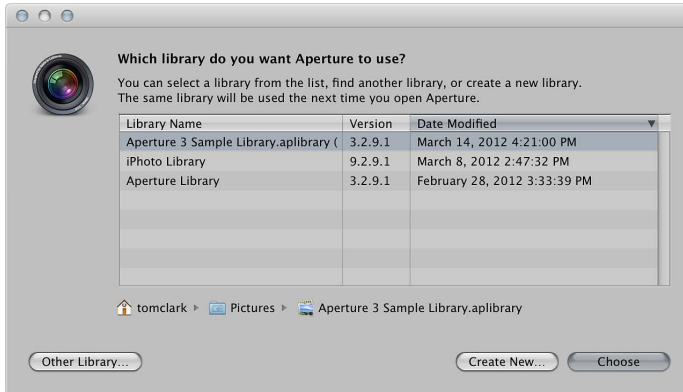
Important: Aperture can only open and view iPhoto libraries upgraded to iPhoto 9.3 or later. To upgrade your iPhoto library, open it in iPhoto 9.3 or later. iPhoto upgrades the library automatically. All cards, books, calendars, and Smart Albums in your iPhoto library can be viewed but not edited in Aperture. To work with your iPhoto cards, books, calendars, and Smart Albums, close Aperture and open your iPhoto library in iPhoto.

Creating New Libraries

If the Aperture library becomes large, you can create additional, separate library files to hold more photos. You can create additional library files in different locations on your internal hard disk or on different hard disks. You can also rename library files as needed. Thus, you might have multiple library files with different names in the same location, with Aperture set to access the library file you want.

To create a new, empty library file in a new location

- 1 Choose File > Switch to Library > Other/New.
- 2 In the dialog that appears, click Create New.



- 3 In the next dialog, enter a name for the library in the Save As field, choose a location, then click Create.

Aperture creates the new library in the location you chose. To open the new library, see [Viewing Other Libraries](#) on page 40.

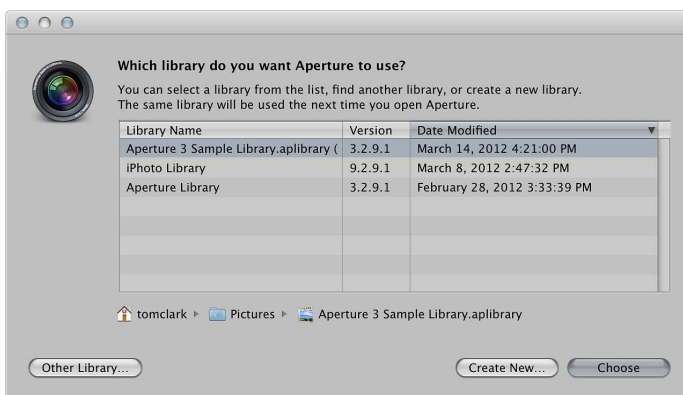
Viewing Other Libraries

When you have multiple Aperture and iPhoto library files accessible to your Aperture system, you can switch between them and view their contents. You can also choose which library file to use when you open Aperture.

Important: Aperture can only open and view iPhoto libraries upgraded to iPhoto 9.3 or later. To upgrade your iPhoto library, open it in iPhoto 9.3 or later. iPhoto upgrades the library automatically. All cards, books, calendars, and Smart Albums in your iPhoto library can be viewed but not edited in Aperture. To work with your iPhoto cards, books, calendars, and Smart Albums, close Aperture and open your iPhoto library in iPhoto.

To access a different Aperture or iPhoto library

- 1 Choose File > Switch to Library > [library filename].
- 2 If the library you are looking for doesn't appear in the Switch to Library submenu, choose Other/New.
- 3 In the dialog that appears, select the library you want to open from the list, then click Choose.



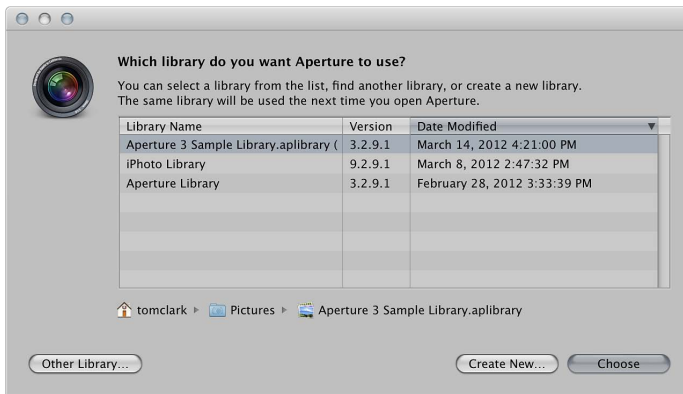
Note: You must close iPhoto before opening your iPhoto library in Aperture.

Aperture opens the library you selected.

To choose which library to use while opening Aperture

- 1 Hold down the Option key while opening Aperture.

A dialog appears, with options for selecting an existing library or creating a new one.



- 2 Do one of the following:

- *To open an Aperture library file shown in the dialog:* Select the library file, then click Choose.
- *To open an Aperture library file not shown in the dialog:* Click the Other Library button, locate the library file in the dialog that appears, then click Select.
- *To open a new, empty library:* Click the Create New button, give the library a name in the Save As field, select a location for the library, then click Create.
Aperture creates a new, empty library file and opens it.

Merging Libraries

If you work with several computers, or work on projects with other people, you may find it necessary to transfer projects and albums from one Aperture system to another. Transferring folders, projects, and albums is a simple export and import process. The items you export are consolidated into a library file. When you import the library into the second Aperture system, you can add files, delete files, modify metadata, and make adjustments. When you're ready to return the contents of the modified library to the original computer, Aperture merges the two libraries together.

To transfer folders, projects, and albums from one computer to another

- 1 In the Library inspector, select the items you want to transfer, then choose File > Export > Items as New Library.

Note: Items in the Export menu change depending on what is selected. If you have a single item, such as an album, selected in the Library inspector, choose File > Export > Album as New Library.

- 2 Enter a name and choose a location for the exported library.

- 3 Do any of the following:

- *If your project contains referenced images and you want the original files to be available to the new Aperture system:* Select the "Consolidate originals into exported library" checkbox to copy the original image files into the new library file.
- *If you want to copy the previews into the new library so that you don't have to rebuild them on the new Aperture system:* Select the "Include Previews in exported library" checkbox.
- *If you want Aperture to alert you when it finishes building the new library:* Select the "Show alert when finished" checkbox.

4 Click Export Library.

Aperture consolidates the selected items into a library, and the library file is exported to the location you chose.

5 Connect or network the two computers together, and copy the exported library file to the second computer.

For more information, see the documentation that came with the computers.

6 Open Aperture on the second computer, then choose File > Switch to Library > [library filename].

You can now work with the exported library from the first computer on the second computer.

To merge the modified library from the second computer into the library of the first computer

When you're ready to merge the modified library on the second computer into the library on the first computer, import it into the open library on the first computer.

1 Follow the steps in the previous task to transfer the modified library on the second computer to the first computer.

2 On the first computer, choose File > Import > Library/Project, locate the modified library file from the second computer, then click Import.

A dialog appears, giving you the option to merge the imported library with the current library or add the contents of the imported library to the current library.

3 Click Merge.

A dialog appears, asking you to choose which library to use to resolve potential conflicts caused by the differences between the libraries.

4 To import the changes in the modified library, choose the library from the second computer.

Aperture imports the modified library from the second computer, merging the changes made to the projects and albums on the second computer into the same projects and albums on the first computer. Any files that were deleted on the second computer, or for some other reason no longer exist in the library file of the second computer, are moved to the Aperture Trash in the library of the first computer.

To add the contents of the library from the second computer without overwriting the contents of the library on the first computer

If you don't want to overwrite the original projects and albums you exported from the first computer to the second computer with the projects and albums you modified on the second computer, you can add the modified projects and albums to the library on the first computer as unique items.

1 Transfer the modified library from the second computer to the first computer.

2 On the first computer, choose File > Import > Library/Project, locate the modified library file from the second computer, then click Import.

A dialog appears, asking you to choose which library to use to resolve potential conflicts caused by the differences between the libraries.

3 Click Add.

Aperture imports the contents of the modified library from the second computer into the library of the first computer. Instead of overwriting the files that changed, Aperture adds the changed files as additional items. If imported items have the same names as existing items in the Library inspector, the names of the imported items are appended with "(1)."

Opening Your Library in iPhoto

You can open your library in iPhoto from within Aperture.

To open your library in iPhoto

- Choose File > Open Library in iPhoto.

Aperture closes and iPhoto opens the library you were working with in Aperture.

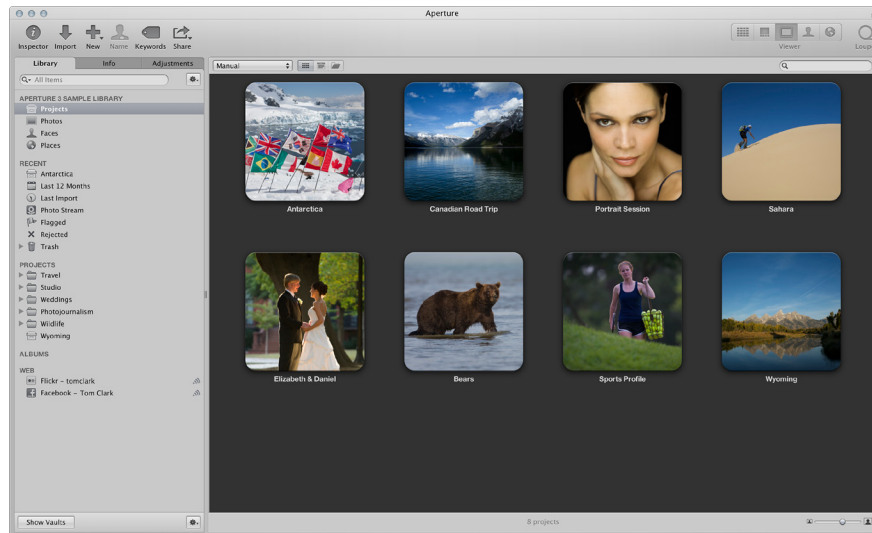
Working in Projects View

Switching to Projects View

Projects view provides a convenient space for organizing and quickly viewing your projects.

To switch to Projects view

- In the Library inspector, select Projects.



Previewing the Photos in a Project in Projects View

If you're looking for a specific group of photos, you can quickly skim the photos within a project.

To quickly preview the photos in a project

Do one of the following:

- Slowly drag the pointer horizontally across the project's thumbnail.
- Select the project's thumbnail, then use the Left Arrow and Right Arrow keys to navigate through the photos in the project.

Creating and Deleting Projects in Projects View

You can create new projects in Projects view, as well as delete them at any time.

To create new projects

- 1 Do one of the following:
 - Choose File > New > Project (or press Command-N).
 - Control-click a project, then choose New > Project from the shortcut menu.
- 2 In the dialog that appears, enter a name for the project in the Project Name field.
- 3 Click OK.

The new, empty project opens in the Browser.

To delete a project

Do one of the following:

- Select a project's thumbnail, then choose File > Delete Project (or press Command-Delete).
- Control-click a project, then choose Delete Project from the shortcut menu.

The selected project is moved to the Aperture Trash. For more information about the Aperture Trash, see [Working with the Aperture Trash](#) on page 38.

Importing Files into a Project in Projects View

You can import files into a project selected in Projects view.

To import files into a project

Do one of the following:

- Select a project's thumbnail, then choose File > Import > Files (or press Command-I).
- Control-click a project, then choose Import > Files from the shortcut menu.

The Import browser appears with the project selected in the Destination pop-up menu. For more information about importing files, see [An Overview of Importing Photos](#) on page 50.

Merging Projects and Libraries into Projects in Projects View

You can merge projects from earlier versions of Aperture and whole Aperture libraries into a selected project.

To merge a project or an Aperture library into a project

- 1 Control-click a project, then choose Import > Library/Project from the shortcut menu.
- 2 In the dialog that appears, select the project or library that you want to merge into the project selected in Projects view, then click Import.

The project or library is merged into the project selected in Projects view. For more information about merging libraries, see [Merging Libraries](#) on page 41.

Setting the Key Photo for a Project

You can set any photo within a project as the *key photo*, which represents the project in Projects view.

To set a photo as the key photo to represent a project

- 1 Do one of the following:
 - Slowly skim through the photos in the project by dragging the pointer over the project's thumbnail image to navigate to the photo you want to set as the key photo.
 - Select the project's thumbnail, then use the Left Arrow and Right Arrow keys to navigate to the photo you want to set as the key photo.
- 2 When you have located the photo you're looking for, press the Space bar.

The selected photo is set as the key photo to represent the project.

Emptying the Aperture Trash in Projects View

After you've performed a lot of housecleaning tasks in Projects view—removing unnecessary or obsolete projects, for example—you can empty the Aperture Trash.

To empty the Aperture Trash

Do one of the following:

- Choose Aperture > Empty Aperture Trash (or press Command-Shift-Delete).
- Control-click a project, then choose Empty Trash from the shortcut menu.

The Aperture Trash is emptied and its contents are moved to the Finder Trash. For more information about the Aperture Trash, see [Working with the Aperture Trash](#) on page 38.

Playing a Slideshow of a Project's Photos

You can select a project and play a slideshow to review the photos within it.

To play a slideshow of a project's photos

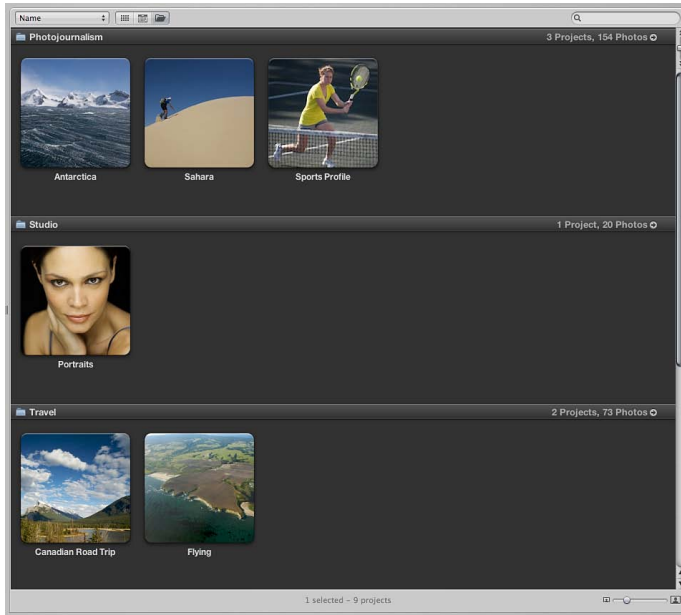
- 1 Do one of the following:
 - Select a project's thumbnail, then choose File > Play Slideshow (or press Shift-S).
 - Control-click a project, then choose Play Slideshow from the shortcut menu.
- 2 In the Play Slideshow dialog, choose a preset from the Slideshow Preset pop-up menu, then click Start.

A slideshow of the photos in the selected project plays. Press the Space bar to pause and play the slideshow, and the Escape key to stop the slideshow. For more information about slideshows, see [An Overview of Slideshows](#) on page 456.

Organizing Projects in Projects View

You can organize your projects by the year the photos were created. If you organize your projects in folders in the Library inspector, you can group your projects by the folders they reside in. You can sort projects by name, in ascending and descending order, and in the order in which the projects appear from top to bottom in the Library inspector. If you have a large number of projects in your library, you can search for a specific project, removing the others from view.

If you have more than one project documenting the same subject and you want to consolidate the projects into a single project, you can merge the projects.



To group projects by year or by folder

- *To group projects by year:* Click the Group by Year button (with a calendar icon) at the top of Projects view.
- *To group projects by folder:* Click the Group by Folder button (with a folder icon) at the top of Projects view.

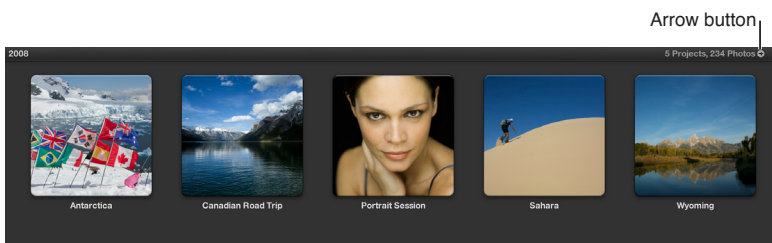
To set Projects view to show a single year or a single folder of projects

When projects are grouped by year or by folder, you can set Projects view to show the projects for a single year or folder only.

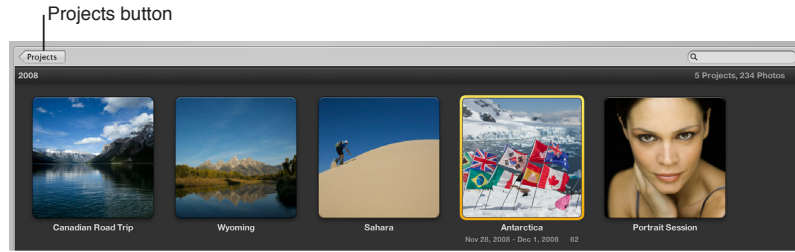
- 1 In Projects view, group the projects by year or by folder.

For example, if you group projects by year, the number of projects and photos created in that year are displayed in the top-right corner of that year's row.

- 2 Click the arrow button to filter Projects view to display only that year's or folder's projects.



Projects view displays the projects for the selected year or folder only. Click the Projects button at the top of the main window in Projects view to display the projects for all years or folders.



To sort projects in Projects view

- *To sort projects by name:* Choose Name from the Sorting pop-up menu.
- *To sort projects in ascending order by the date the photos were captured:* Choose Date – Newest First from the Sorting pop-up menu.
- *To sort projects in descending order by the date the photos were captured:* Choose Date – Oldest First from the Sorting pop-up menu.
- *To sort projects by the order in which they appear in the Library inspector:* Choose Library from the Sorting pop-up menu.

To search for projects by name

- In Projects view, enter the name of the project you want to locate in the search field.

All projects are removed from view except for the project or projects matching the name in the search field. Click the Cancel button in the search field to set Projects view to display all projects again.

To view a project's photos in the Browser

When you've located the project you want to work with, you can view the project's photos in the Browser.

- Double-click the project.

The Browser replaces Projects view and displays the selected project's thumbnail images.

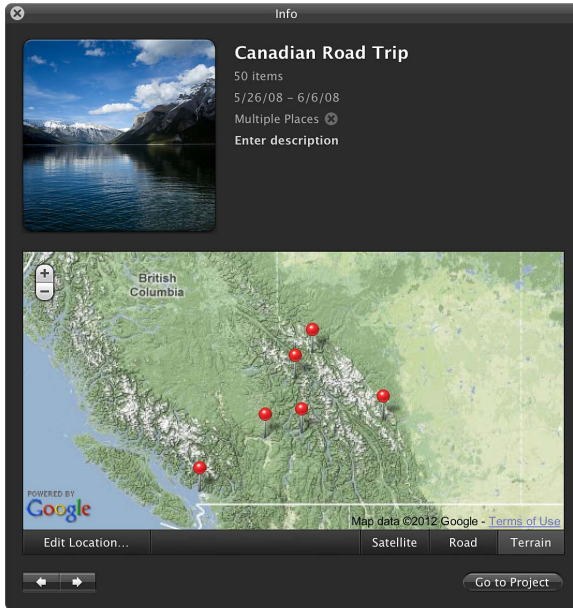
To merge projects in Projects view

- 1 In Projects view, select the project or group of projects that you want to merge with another project.
- 2 Drag the selected project or projects into the project that you want to contain the other project or projects.

Working with the Info HUD in Projects View

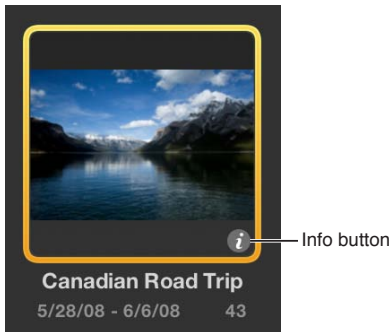
In Projects view, you use the Info HUD to navigate through the projects in the library, set the key photo for a project, and assign location information to photos within a project.

For more information about assigning location information using the Info HUD, see [Assigning Location Information to Projects](#) on page 223.



To open the Info HUD in Projects view

- Click the Info button on a project's thumbnail.



The Info HUD appears, displaying information about the selected project.

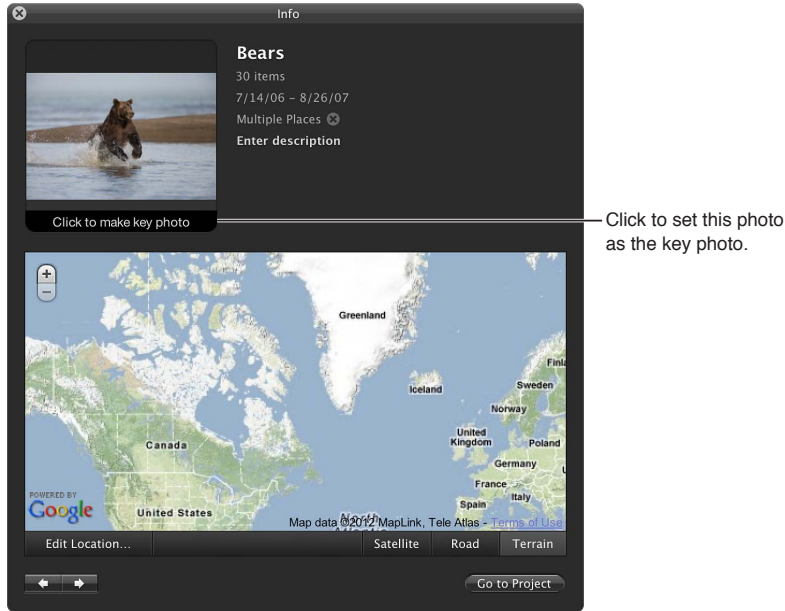
To navigate through your projects using the Info HUD

- Click the navigation buttons at the bottom-left corner of the HUD.

To set the key photo for a project

- 1 Select the project whose key photo you want to change.
- 2 In the Info HUD, slowly skim through the photos in the project by dragging the pointer over the project's thumbnail image.

- 3 When you locate the photo you're looking for, click the "Click to make key photo" button at the bottom of the thumbnail.



The selected photo is set as the key photo to represent the project.

To enter descriptive information about a project

- 1 Select the project for which you want to add or change descriptive information.
- 2 In the Info HUD, enter descriptive information about the project in the description field.

To open a project using the Info HUD

- 1 Select the project you want to open using the navigation controls in the Info HUD.
- 2 Click the Go to Project button.

The selected project opens in the Viewer and Browser.

Importing Photos

3

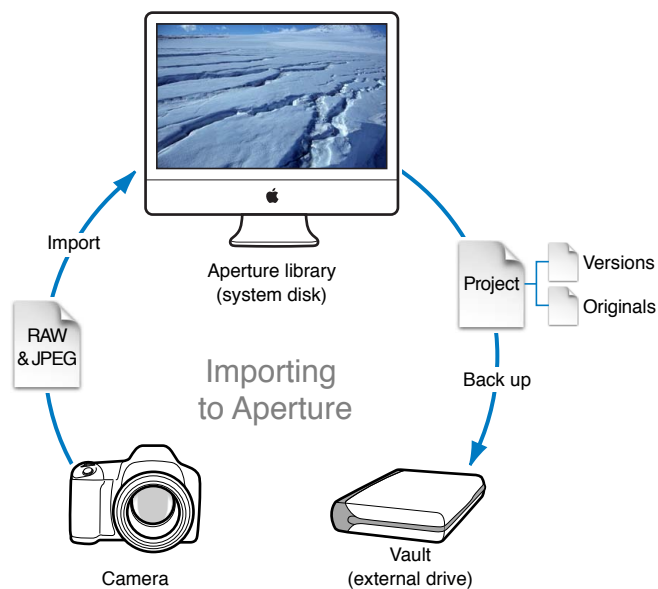
An Overview of Importing Photos

Aperture provides tools and workflow options that make it easy to import your photos. You can import photos directly from your digital camera or card reader, and import photos stored on your computer hard disk or other storage devices. You can also import audio and video files.

You no longer have to import photos individually from your iPhoto library into Aperture. Aperture can open, view, and work with iPhoto libraries the same way it works with multiple Aperture library files. For more information about opening your iPhoto library in Aperture, see [An Overview of Library Files](#) on page 39.

When you import from a digital camera or card reader, Aperture places the photos in a project. If you don't select an existing project, a new one is created automatically.

As Aperture imports photos, video files, and audio files, it generates a version file, preview, and thumbnail corresponding to each original.



You can import originals directly from a digital camera or card reader and from your hard disk drives.

When you import photos, you can choose whether to have the originals stored in the Aperture library or on a hard disk outside of the library, where they can be accessed as referenced images. For more information about referenced images, see [What Are Managed Images and Referenced Images?](#) on page 28.

As you import photos, you can set Aperture to automatically name and record information about them. Aperture can assign filenames using custom naming conventions; record metadata such as captions, keywords, dates, copyright and credit information, and IPTC information; and adjust the time when the photo was shot to the correct time zone. If the photo has an XMP sidecar file, Aperture imports it as well and adds the metadata to the image version. You can even set Aperture to automatically back up your photos as they are imported. For more information, see [An Overview of the Backup Workflow](#) on page 581.

Important: Audio files, audio attachments, and PDFs imported into your Aperture library are not visible when you open your Aperture library in iPhoto. To view and work with these items, open your Aperture library in Aperture.

File Formats You Can Import into the Library

Aperture supports most image, audio, and video file formats captured by digital cameras. File types and formats that can be imported into your Aperture library include:

- GIF
- JPEG
- JPEG2000
- PDF
- PNG
- PSD (8- and 16-bit)
- TIFF (8- and 16-bit)
- BMP
- DNG
- RAW files from a variety of supported digital cameras
- AIF
- WAV
- MOV
- AVCHD

Important: Aperture does not support 1080p AVCHD footage recorded at 60 frames per second (fps) or 50 fps.

Note: For a list of supported digital cameras, go to <http://www.apple.com/aperture/specs>.

Planning Your Import Strategy

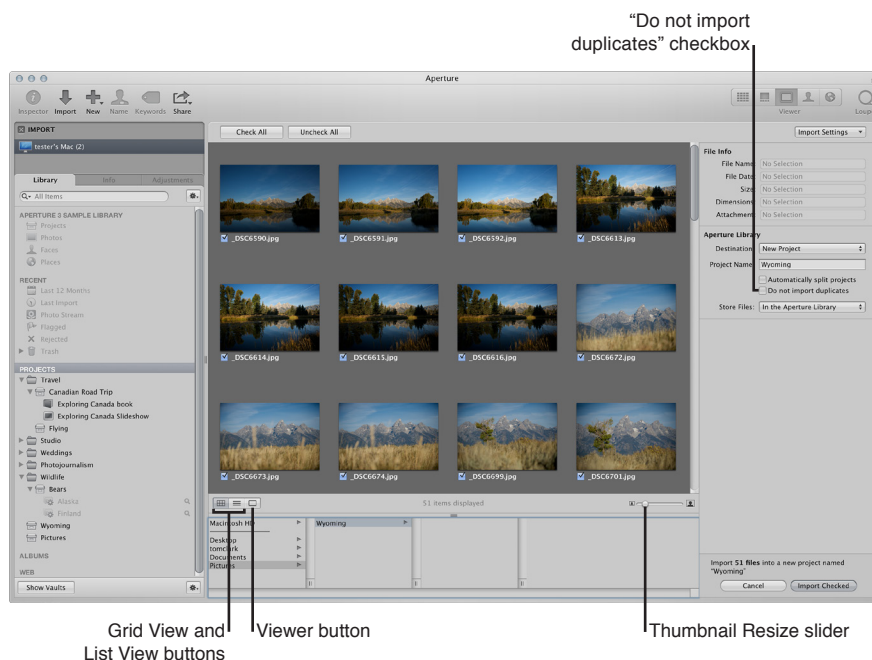
Before you import photos into Aperture, it's a good idea to plan the organization of your photos. Eventually your photo library may contain many thousands of photos that you'll want organized in a flexible and easy-to-manage system. It's important to take a long-term view of what makes for an effective and efficient organization of your projects based on your specific type of photography.

You may already have a large digital portfolio that you eventually want to import into the Aperture library. As an import strategy, it's best to try out importing photos in a series of steps:

- If you have an iPhoto library, you can open your iPhoto library and work with its contents directly in Aperture. For more information about opening iPhoto libraries in Aperture, see [An Overview of Library Files](#) on page 39.
- Make trial imports of a small group of photos directly from your digital camera or card reader. Learn about import features, such as automatic filenames and the application of metadata presets. For information about importing from your digital camera or card reader, see [Importing from Your Digital Camera or Card Reader](#) on page 53.
- Plan how you want to import your legacy digital photos. Because you may have many tens of thousands of image files already stored on disk, you need to decide whether you'll store newly imported photos in the Aperture library or store them as referenced images, leaving them in their current hard disk locations. You can also copy or move image files to a different hard disk location when importing them. Also, plan the project organization you'll need to hold the photos. For more information about importing files, see [Importing Files Stored on Your Computer or Connected Servers](#) on page 57.
- Try out the different methods for importing individual files into your system. You can import individual files, import files stored in folders, and drag files or folders from the Finder into Aperture. For more information, see [Importing Files from the Finder via Drag and Drop](#) on page 69 and [Importing Folders of Files from the Finder](#) on page 70.

After you're familiar with Aperture, you can begin to create and organize your personal photo management system.

When you connect a digital camera or select an item in the Import pane, the Import browser appears.



You use the options in the Import browser to specify how and where photos are imported. The Import browser shows thumbnails of your photos that you can enlarge or reduce in size using the Thumbnail Resize slider. You can select individual photos to import or import all the photos at once. You can also set the Import browser to display photos in a list by clicking the List View button. In list view, you can click a column heading to sort photos by category. If you are unsure whether or not a specific photo should be imported, you can click the Viewer button to inspect a high-resolution version of the photo.

When you import photos, Aperture automatically checks to see if any of the photos are duplicates of previously imported photos. Aperture checks the filename of the original to determine if a photo is a duplicate of one in the library. Select the “Do not import duplicates” checkbox to prevent Aperture from importing duplicates. If this checkbox is unselected, Aperture imports all photos, even if they are duplicates, and creates a new original with a different name for each duplicate. Aperture never overwrites or replaces an original that has already been imported.

Importing from Your Digital Camera or Card Reader

Using the Import browser, you can import photos from a digital camera or card reader into Aperture in two ways. You can import all photos on the camera or card reader at once, or you can import a selection of photos from the camera or card reader.

You can also:

- Store imported photos in the Aperture library or select a different location on your hard disk and import the photos as referenced images
- Have Aperture automatically delete the image files on your memory card after the photos are imported
- Have Aperture automatically split the photos into multiple projects based on the length of time between shots
- Have Aperture automatically back up photos as they are imported
- Display photos in the Import browser as a grid of thumbnails or as a list that you can sort
- Apply a naming convention to standardize the names of the image files in the library
- Apply metadata to the image files, such as keywords, captions, copyright information, and the photographer’s name. You can also keep or replace existing metadata associated with a photo when you import the image.
- Adjust the shoot time of photos that were shot in a different time zone

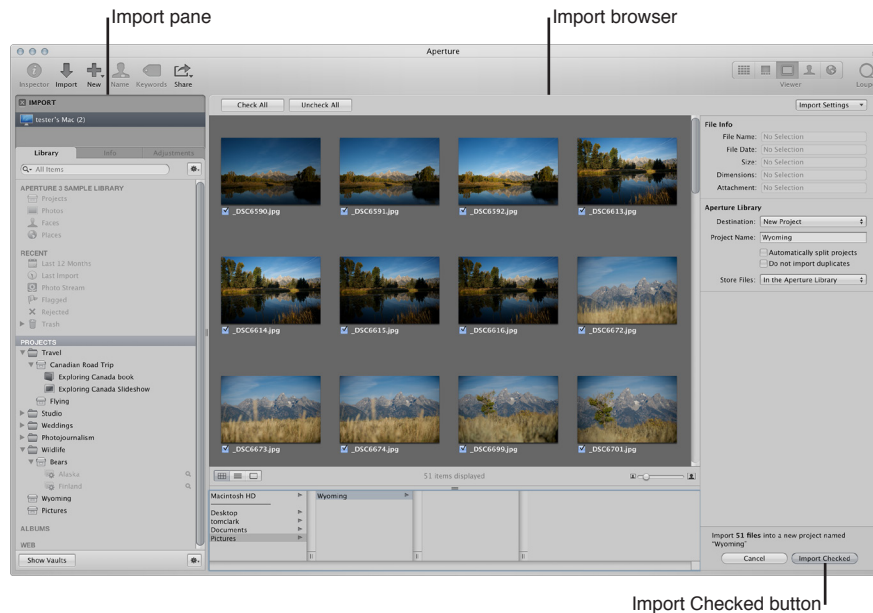
Note: When connecting your camera directly to the computer, make sure that you turn the camera on and set it to the mode for transferring photos (PC, PTP, Normal, or another mode, depending on the type of camera). Some cameras automatically select the correct transfer mode when connected to a computer. See your camera’s manual for specific instructions. If you have a card reader, it’s preferable to transfer photos using the card reader rather than the camera. Using a card reader saves you time and doesn’t require the use of your camera’s battery.

To import photos from a camera or card reader into Aperture

- 1 Connect your camera or card reader to your computer.

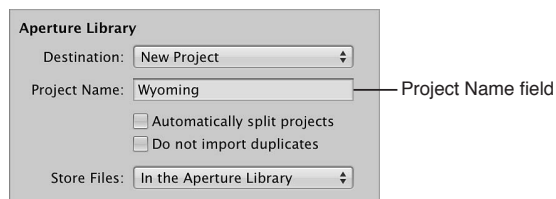
The Import browser appears, showing the photos on the camera or card.

Note: If iPhoto opens when you connect your camera or card reader, quit iPhoto. Then, in Aperture, choose Aperture > Preferences and click Import. Choose Aperture from the “When a camera is connected, open” pop-up menu. Disconnect and reconnect your camera to have Aperture open the Import browser.

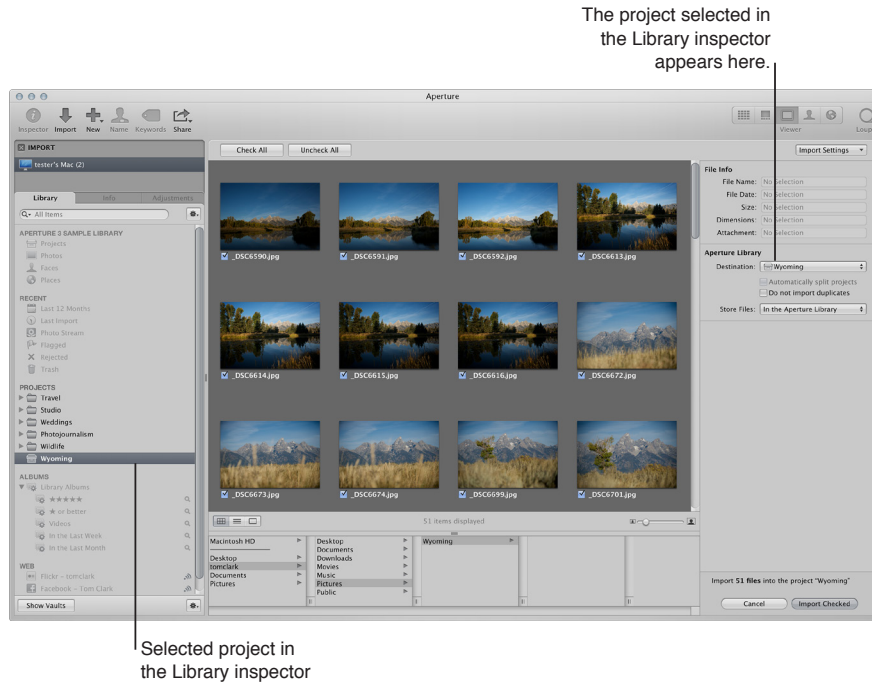


- 2 Do one of the following:

- If you want to import the photos into a new, empty project: Choose New Project from the Destination pop-up menu to create a new project, and enter a name for the project in the Project Name field.



- If you want to import the photos into an existing project: Select the project in the Library inspector.

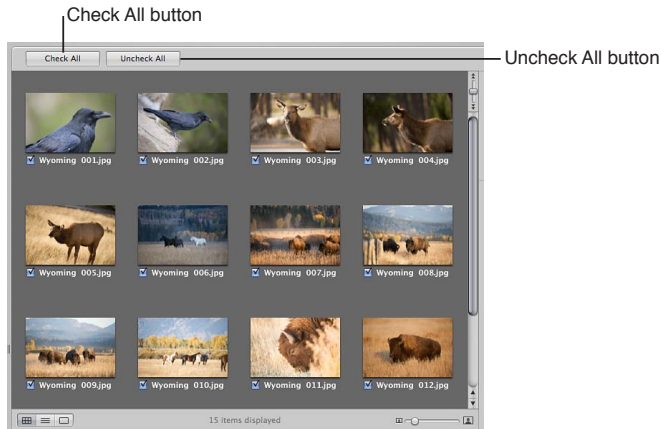


The selected project appears in the Destination pop-up menu.

- 3 Choose a location to store the original image files by doing one of the following:
 - To store imported originals in the Aperture library: Choose “In the Aperture Library” from the Store Files pop-up menu.
 - To store imported originals as referenced images in the Pictures folder on your hard disk: Choose Pictures from the Store Files pop-up menu, then choose whether you want the image files moved or copied to the Pictures folder by clicking the “Move files” or “Copy files” button.
 - To store imported originals as referenced images in a location other than the Pictures folder: Choose “Choose” from the Store Files pop-up menu and select a folder. In the dialog that appears, choose a location to store the imported originals, then click Open. Choose Project Name from the Subfolders pop-up menu to specify that the files be stored in a folder with the same name as the project. Choose whether you want the image files moved or copied to the new location by clicking the “Move files” or “Copy files” button.
- 4 To add controls for additional import settings, choose an option from the Import Settings pop-up menu.

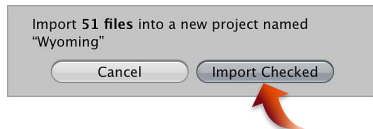
For more information about Import Settings, see [An Overview of Import Options](#) on page 60.

5 Do one of the following:



- *To import all photos from the camera or card reader:* Click the Check All button. The checkboxes for all the photos in the Import browser are selected.
- *To import a subset of photos from the camera or card reader:* Click the Uncheck All button to clear the checkboxes for all photos, then select the checkboxes for the photos you want to import.
You can also Shift-click adjacent photos and Command-click nonadjacent photos, and then select the checkbox for one of the photos. Selecting a single checkbox selects the checkboxes for all of the selected photos.
Note: You can double-click a thumbnail image to see a larger version of the photo, if you want to verify its contents before importing it.

6 Click the Import Checked button.



The import process begins and an indicator appears next to the project's name, showing the progress of the import. When the photos are imported, a dialog appears.

7 Click Eject Card, Erase Imported Items and Eject Card, or Done.

Note: The options offered in this dialog depend on the way your camera is made available when it is connected. Some cameras connect as mass storage devices. When you import from these cameras, the Erase and Eject options appear. Other cameras simply connect as cameras, and you will not see either Erase or Eject after the import is completed. In that case, you can erase the photos directly in the camera.

As the photos appear in the Browser, you can begin working with them. Photos may temporarily appear as gray boxes until the loading process is complete.

Importing Files Stored on Your Computer or Connected Servers

You can import image, audio, and video files stored on your computer and other storage devices. You have a choice of storing the imported files in the Aperture library, or importing the files as referenced image, audio, and video files and then moving or copying them to a different location.

Note: If you have folders of photos to import, you can import them using the Import Folders as Projects command in the File menu. For more information, see [Importing Folders of Files from the Finder](#) on page 70.

You can import image files in many common image formats, including images scanned from nondigital sources such as film and photographic prints. You can also import any QuickTime-compatible audio or video file. Adding these files to your Aperture database is as simple as navigating to the folder where they reside on your hard disk using the Import browser.

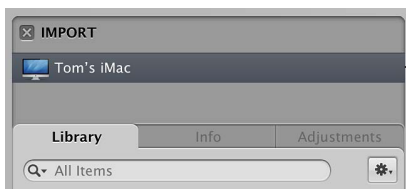
When you import files from a folder on your computer system, you can import the files into a new project or an existing one.

To import files stored on your computer's hard disk or another storage device

- 1 Click the Import button in the toolbar (or press Command-I).

The Import browser appears.

- 2 Select your computer.

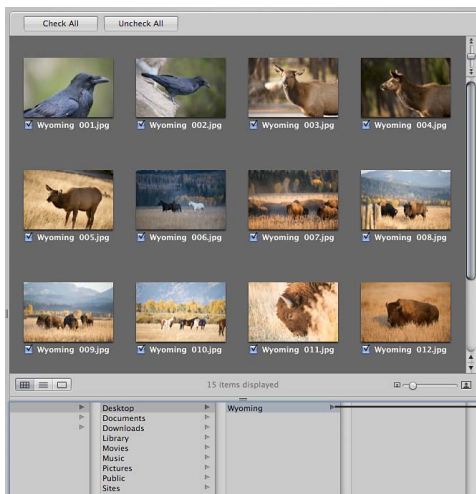


Select the source where the photos you want to import are located.

- 3 At the bottom of the browser, navigate to the folder containing the files you want to import.

Your computer, connected servers, and connected storage devices are listed in the column on the left.

Tip: To quickly select the desktop, press Command-D.

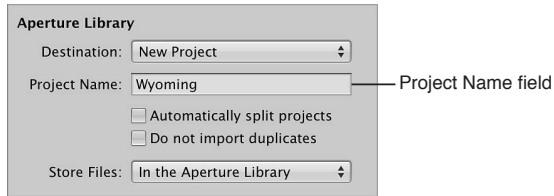


Select the folder of photos you want to import.

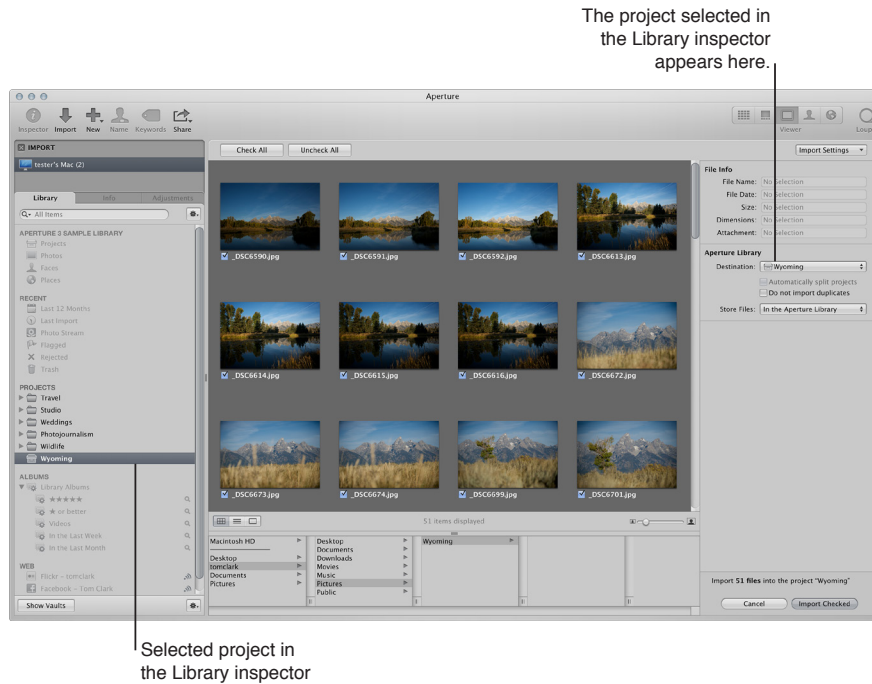
When you select the folder containing the files you want to import, thumbnail images appear in the Import browser representing the image, audio, and video files within it.

4 Do one of the following:

- If you want to import the files into a new, empty project: Choose New Project from the Destination pop-up menu to create a new project, then enter a name for the project in the Project Name field.

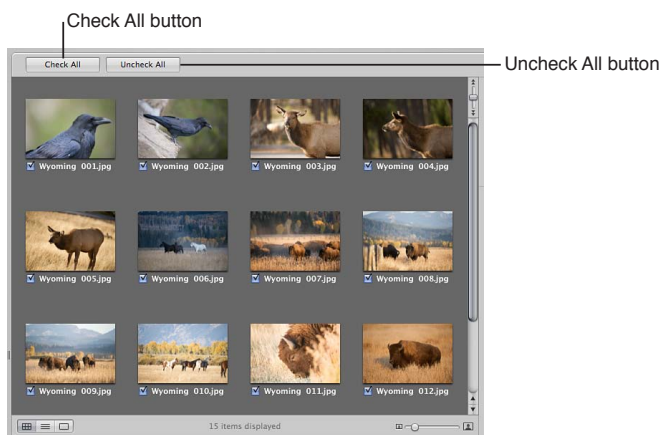


- If you want to import files into an existing project: Select the project in the Library inspector.



The selected project appears in the Destination pop-up menu.

5 Do one of the following:



- *To import all the files in the selected folder:* Click the Check All button. The checkboxes for all the files in the Import browser are selected.
- *To import a subset of files from the selected folder:* Click the Uncheck All button to clear the checkboxes for all photos, then select the checkboxes for the photos you want to import.
Note: You can double-click a thumbnail image to see a larger version of the photo if you want to verify its contents before importing it.

6 Choose a location for the imported files by doing one of the following:

- *To store imported originals in the Aperture library:* Choose “In the Aperture Library” from the Store Files pop-up menu.
- *To store imported originals as referenced image files, audio files, or video files in their current location:* Choose “In their current location” from the Store Files pop-up menu.
- *To store imported originals as referenced image files, audio files, or video files in the Pictures folder on your hard disk:* Choose Pictures from the Store Files pop-up menu, then choose whether you want the files moved or copied to the Pictures folder by clicking the “Move files” or “Copy files” button.
- *To store imported originals as referenced image files, audio files, or video files in a location other than the Pictures folder:* Choose “Choose” from the Store Files pop-up menu and select a folder. In the dialog that appears, choose a location to store the imported originals, then click Open. Choose Project Name from the Subfolders pop-up menu to specify that the files be stored in a folder with the same name as the project. Choose whether you want the image files moved or copied to the new location by clicking the “Move files” or “Copy files” button.

7 To add controls for additional import settings, choose an option from the Import Settings pop-up menu.

For more information about Import Settings, see [An Overview of Import Options](#) on page 60.

8 Click the Import Checked button in the lower-right corner of the Import browser.

The import process begins and an indicator appears next to the project’s name, showing the progress of the import. When the import process is complete, a dialog appears.

Tip: If you want to immediately import additional image, audio, or video files, Option-click the Import Checked button. The Import browser remains open, and you can immediately start importing additional items.

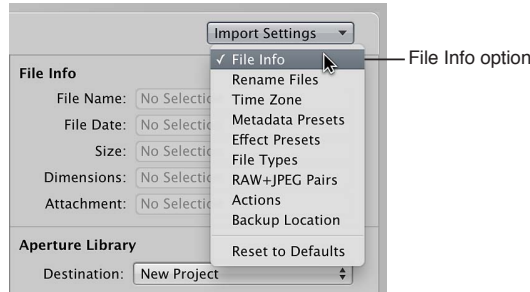
As the files appear in the Browser, you can begin working with them.

Important: You can import and export XMP sidecar files in Aperture. However, Aperture displays only metadata that adheres to the XMP 1.0 specification. Ratings, label values, and custom metadata created by third-party applications are not supported.

Adding Import Options

An Overview of Import Options

In the Import browser, you can add additional import options to refine how files are brought into Aperture. You add controls for additional import settings by choosing an option from the Import Settings pop-up menu. After you modify the import settings, you can remove them from view by deselecting the option in the Import Settings pop-up menu.



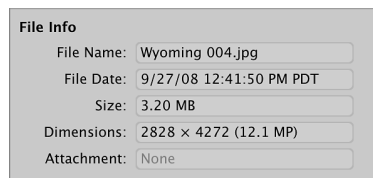
Viewing File Information

By default, basic file information about the photos you are about to import into Aperture is not shown in the Import browser. However, you can set Aperture to show this information.

To show basic file information about the files displayed in the Import browser

- In the Import browser, choose File Info from the Import Settings pop-up menu.

Basic metadata about the file selection appears above the Aperture Library controls in the Import browser.



Note: When a photo with an attachment is selected, the duration of that attachment is displayed. If the selection is a movie or audio file, the duration is shown as well.

Automatically Naming Your Imported Photos

The filenames given to photos by the camera are often difficult to distinguish. When you import photos, you can have Aperture use the original name assigned by the camera or use a filenaming convention that you choose or create. For example, you can use a name format that includes a name that you specify, plus the date, the time, and an index number. Aperture provides a number of preset name formats, and you can also create your own naming conventions to suit the different types of shoots you do. You can choose a preset name format when you import new photos.

You can apply names to your image files when you import them and when you export them. You can specify names to apply to the versions and to the originals. For example, when you import photos from your camera, you can specify that a name format be applied to each image version that Aperture creates. You can also specify that Aperture apply names to the originals as they are stored in the library or on a hard disk. When importing image files, you select the Rename Original File checkbox to apply a name format to the originals. Then both the versions and the originals share the same name format. When you export originals, you can also rename them.

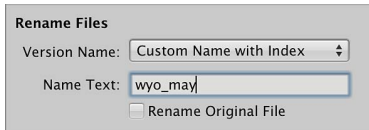
When you import originals as referenced images, you can't rename the originals if you leave them in their original locations. However, when you import originals as referenced images and move them to a new hard disk location, you can rename them at that time.

Note: If you back up your files on import, the copied files are also renamed. For more information about backing up your files on import, see [Automatically Backing Up Your Imported Files](#) on page 64.

To automatically name your files during import

- 1 In the Import browser, choose Rename Files from the Import Settings pop-up menu.

The Rename Files controls appear in the Import browser.



- 2 Do one of the following:
 - *To apply a preset name format to your files as they are imported:* Choose a preset name format from the Version Name pop-up menu.
 - *To use the existing filenames:* Choose None from the Version Name pop-up menu.
 - *To create a new name format:* Choose Edit from the Version Name pop-up menu, and create a custom name format in the File Naming dialog.

For more information about creating new name formats, see [Creating Custom Name Formats](#) on page 62.

- 3 If you choose a name format with a custom name, the Name Text field appears below the Version Name pop-up menu. Enter a name for the photos in the Name Text field.
- 4 Select the Rename Original File checkbox if you want to change the filenames of the originals on disk to match the version names.

Aperture provides the following preset name formats in the Version Name pop-up menu by default.

Preset name format	Example
Custom Name with Index	Thailand 1, Thailand 2, and so on
Custom Name with Index (no spaces)	Thailand1, Thailand2, and so on
Version Name	IMG001
Version Name and Date/Time	IMG001 - 2008-10-14 09.03.25 PM
Version Name with Sequence	IMG001 (1 of 2), IMG002 (2 of 2), and so on
Version Name with Index	IMG001 1, IMG002 2, and so on
Image Date/Time	2008-10-14 09.03.25 PM
Custom Name with Counter	Thailand 001, Thailand 002, and so on

Applying Valid Filenames

Proper filenameing is one of the most critical aspects of media and project management. When you capture your originals, consider how and where your files may be used in the future. Naming your files simply and consistently makes it easier to share media among multiple photographers, transfer projects to other Aperture systems, move files across a network, and properly restore archived projects.

The most conservative filenameing conventions provide the most cross-platform compatibility. This means that your filenames will work in different operating systems, such as OS X and other UNIX-based operating systems, and Windows. You also need to consider filenameing when you transfer files over the Internet, where you can never be certain what computer platform your files may be stored on, even if temporarily.

Avoid	Example characters	Reasons
File separators	/ (slash) \ (backslash)	Some applications may not allow you to use slashes in the names of items. These characters are directory separators for OS X and DOS (Windows), respectively.
Special characters not included in your native alphabet	©™	These characters may not be supported or may be difficult to work with when exported to other applications.
Punctuation marks, parentheses, quotation marks, brackets, and operators	.,[]{}()!;"`*? <>	These characters are often used in scripting and programming languages.
White space characters such as spaces, tabs, new lines, and carriage returns (the last two are uncommon)		White space is handled differently in different programming languages and operating systems, so certain processing scripts and applications may treat your files differently than expected. The most conservative filenames avoid all use of white space characters and use the underscore (_) character instead.

Creating Custom Name Formats

In addition to the preset name formats, you can create custom name formats. To create a name format, you select the name elements you want in the File Naming dialog. You can compose a name format that combines the following name elements:

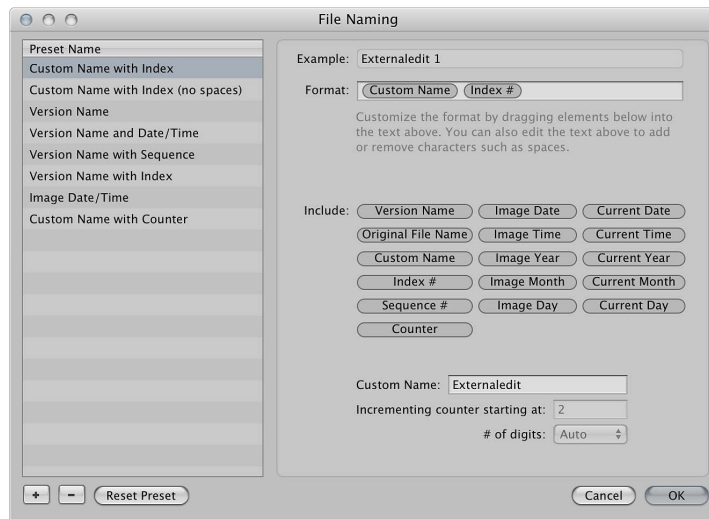
- Version Name
- Original File Name
- Sequence Number (1 of 5, 2 of 5, 3 of 5, and so on)
- Image Year
- Image Month
- Image Day
- Image Date
- Image Time
- Index Number (1, 2, 3, and so on)
- Custom Name

- Counter (001, 002, 003, and so on)
- Current Date
- Current Time
- Current Year
- Current Month
- Current Day

To create a custom name format

- 1 In the Import browser, choose Rename Files from the Import Settings pop-up menu, then choose Edit from the Version Name pop-up menu.

The File Naming dialog appears.



- 2 Click the Add (+) button to create a new name format, or select the preset name format you want to change.
- 3 Drag the name elements you want into the Format field in the order you want them. You can also add valid characters or spaces between the name elements. For more information about valid filenames characters, see [Applying Valid Filenames](#) on page 62.
- 4 Enter a custom name in the Custom Name field, if you like.
- 5 Click OK.

Your new name format now appears in the Version Name pop-up menu.

To reset the starting number of a counter in a name format

When using a counter in your name format, you can specify the starting number and the number of digits, from one to six, that appear in the counter. When you use a preset name format with a counter, make sure to reset the initial starting number, if necessary. Otherwise, on the next import, Aperture will continue numbering the imported files starting from the last number of the previous import.

Do one of the following:

- In the File Naming dialog, type “0” (zero) in the “Incrementing counter starting at” field.
- In the File Naming dialog, select the preset whose counter you want to reset to zero, then click the Reset Preset button.

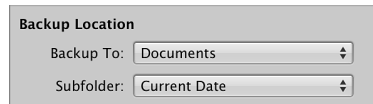
Automatically Backing Up Your Imported Files

Creating copies of your photos from the moment you take them is essential to the preservation of your work. In Aperture, you can back up your original files as they are imported, using the Back Up Files import option. Backing up your image, video, and audio files at import ensures that if something catastrophic happens to your computer system, copies of your original files are stored somewhere safe. If you back up your files during import, Aperture makes a copy of each file and places the copied files in the location you specify.

To back up your original files during import

- 1 In the Import browser, choose Backup Location from the Import Settings pop-up menu.

The Backup Location controls appear in the Import browser.



- 2 Do one of the following:

- *To back up your files to the Documents folder:* Choose Documents from the Backup To pop-up menu.
- *To back up your files to a new location:* Choose "Choose" from the Backup To pop-up menu, then select a location from the dialog that appears.

Note: It's a good idea to back up your original files to a location other than your computer. This is the only way to ensure that your original files are safe if something catastrophic happens to your computer.

To turn off automatic backup during import

- Choose None from the Backup To pop-up menu.

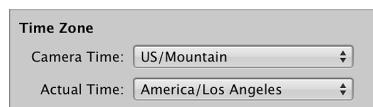
Adjusting the Image File's Time When Importing

On a trip, it's easy to forget to update your camera's clock to match the local time zone. If you didn't synchronize your camera time to the new location, Aperture lets you correct the time assigned to the image file by whole hours when importing.

To adjust image file capture time when importing

- 1 In the Import browser, choose Time Zone from the Import Settings pop-up menu.

The Time Zone controls appear in the Import browser.



- 2 Choose the time zone that matches the camera's time setting from the Camera Time pop-up menu.
- 3 Choose the time zone of the shoot location from the Actual Time pop-up menu.

Aperture updates the capture time of your image files according to the Time Zone settings.

After you've imported photos, you can adjust the date and time of any versions you've created by choosing Metadata > Adjust Date and Time. For more information, see [Adjusting the Photo Date and Time](#) on page 198.

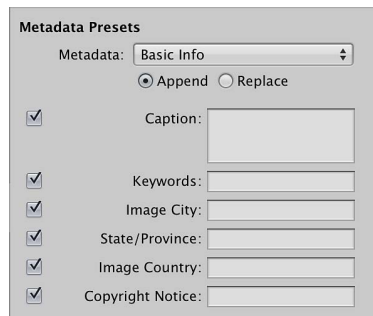
Adding Metadata to Photos During Import

You can add metadata to your photos as they are imported into Aperture. Adding metadata during the import process helps you keep track of your photos and quickly locate them using the Smart Settings HUD and Filter HUD. For example, you can add IPTC keywords and other metadata to the photos.

To add metadata to photos as they're imported

- 1 In the Import browser, choose Metadata Presets from the Import Settings pop-up menu.

The Metadata Presets controls appear in the Import browser.



- 2 Do one of the following:

- *To show the metadata fields for a metadata preset:* Choose a metadata preset from the Metadata pop-up menu.
- *If you don't want to modify the metadata of the files during import:* Choose None from the Metadata pop-up menu.
- *To create a new metadata preset:* Choose Edit from the Metadata pop-up menu, then create a new metadata preset using the Metadata dialog.

For more information, see [Creating Metadata Presets](#) on page 191.

When you choose a metadata preset, Aperture displays the metadata fields for that preset. You can enter the metadata you want in the fields.

- 3 Do one of the following:

- *To add metadata to the photo while maintaining any associated metadata:* Click Append.
- *To add metadata and overwrite any associated metadata:* Click Replace.

When you choose a metadata preset, Aperture displays the list of metadata fields and metadata for that preset. You can edit the metadata preset to store any metadata that you want to apply frequently to your photos using the Info inspector. For more information, see [Creating Metadata Presets](#) on page 191.

Applying Effects to Photos During Import

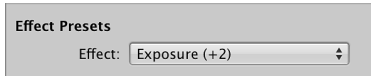
You can apply image effects and basic image adjustments, such as an exposure adjustment, to your photos as they are imported. You apply effects and image adjustments by choosing an effect preset from the Effects pop-up menu. The effect preset is applied uniformly to every imported photo until it is turned off.

You can edit effect presets that you want to apply frequently to your photos. For more information, see [An Overview of Effects](#) on page 274.

To apply effects to photos as they are imported

- 1 In the Import browser, choose Effect Presets from the Import Settings pop-up menu.

The Effect Presets controls appear in the Import browser.



- 2 Choose an effect preset option to apply to the imported photos from the Preset pop-up menu.

To turn off effects during import

- In the Effect Presets controls, choose None from the Effect pop-up menu.

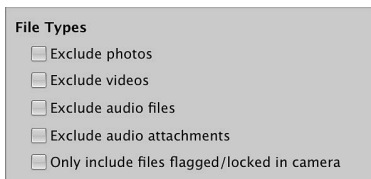
Filtering Files by Type During Import

Some digital cameras allow you to add audio attachments to your photos. For example, some cameras allow you to record audio annotations for a photo after you shoot it. The camera attaches the audio file to the image file so that you can review the audio when you download the photo. When you connect a digital camera or card reader or point to a folder with photos on your computer, Aperture recognizes any photo that has an audio attachment. You can also import standalone QuickTime-compatible audio and video files.

To filter files by type during import

- 1 In the Import browser, choose File Types from the Import Settings pop-up menu.

The File Types controls appear in the Import browser.



- 2 Do any of the following:
 - *To exclude image files, leaving only audio and video files available for import:* Select the “Exclude photos” checkbox.
 - *To exclude video files during import:* Select the “Exclude videos” checkbox.
 - *To exclude audio files during import:* Select the “Exclude audio files” checkbox.
 - *To exclude all audio files attached to the photos:* Select the “Exclude audio attachments” checkbox.
 - *To include only files that were flagged or locked using the camera:* Select the “Only include files flagged/locked in camera” checkbox.

All photos matching the selected criteria appear in the Import browser. To make all the photos reappear, deselect the checkboxes above.

Important: An audio file is imported into Aperture as an attachment when the audio file's name matches the image file's name. For example, when you import "file.nef" and "file.wav," Aperture imports the .wav file attached to the .nef raw image file. Audio files are automatically attached during all types of import: from a connected camera or card reader, from internal and external hard disk drives, as well as via drag and drop. If the audio filename is not the same as the image filename, it will not be attached to the photo even if imported directly from a camera or a card reader. However, there is one exception: some Canon cameras, including the G9 and G10, prefix the audio filename with "SND" and the image filename with "IMG"; these audio files are imported as attachments.

Importing RAW + JPEG Image Pairs

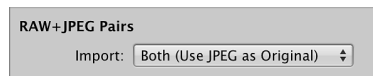
Many digital cameras have a setting for creating a RAW file plus a JPEG file for each photo as you shoot. Many photographers use the RAW + JPEG workflow for the convenience of publishing the JPEG images quickly while saving the RAW files for high-resolution prints. Aperture provides several options for importing the RAW + JPEG image pairs. However, if you decide to import the JPEG image files only, you can go back and import the corresponding RAW files later.

Note: The RAW + JPEG Pairs import setting remains in effect from one import session to the next.

To filter RAW + JPEG pairs during import

- 1 In the Import browser, choose RAW + JPEG Pairs from the Import Settings pop-up menu.

The RAW + JPEG Pairs controls appear in the Import browser.



- 2 Choose an option from the Import pop-up menu:
 - *To import both the RAW and the JPEG image files and set the JPEG file in each pair as the original:* Choose "Both (JPEG as Original)."
 - *To import both the RAW and the JPEG image files and set the RAW file in each pair as the original:* Choose "Both (RAW as Original)."
 - *To import the RAW and JPEG image files as separate originals:* Choose "Both (Separate Originals)."
 - *To import the JPEG files only:* Choose "JPEG files only."
 - *To import the RAW files only:* Choose "RAW files only."

To import the RAW files that match the JPEG files in your Aperture library

- 1 Choose "Matching RAW files" from the Import pop-up menu.

The Include pop-up menu appears below the Import pop-up menu.

- 2 Choose an option from the Include pop-up menu:
 - *To import all matching RAW files regardless of rating:* Choose "All matching files."
 - *To import all RAW files matching JPEG files that are unrated or better:* Choose "Unrated or better."
 - *To import all RAW files that match the current rating:* Choose "Current filter."

Using AppleScript Actions Immediately After Import

The Aperture community provides many AppleScript actions online to automate repetitive tasks in Aperture, and you can create your own AppleScript actions to help automate your workflow. You can use AppleScript actions from within Aperture immediately after an import operation is complete.

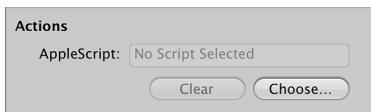
For more information about AppleScript actions for use with Aperture, go to <http://www.apple.com/aperture/resources>.

Important: All scripts must use the import event handler: `on importActionForVersions(input).`

To use AppleScript actions immediately after import

- 1 Choose Actions from the Import Settings pop-up menu.

The Actions controls appear in the Import browser.



- 2 If no AppleScript action is selected, click the Choose button and locate a script from the dialog that appears.

The selected AppleScript action appears in the AppleScript field and is set to begin as soon as the import operation is complete.

Note: The AppleScript action is applied only to the current import operation.

To stop AppleScript actions from automatically starting after import

- Click the Clear button.

Resetting Your Import Settings

The import settings you set in the Import browser remain in effect from import session to import session, regardless of whether or not they are shown. However, you can quickly reset the import settings to their defaults.

To reset the import settings to their defaults

- In the Import browser, choose Reset to Defaults from the Import Settings pop-up menu.

Importing Files from the Finder via Drag and Drop

You can drag image, video, and audio files from the Finder or desktop directly into the Library inspector, Viewer, and Browser. This is useful if you receive image files from a source other than your camera and you want to use them in Aperture. You can also use this technique if you have image, audio, and video files scattered on your desktop or throughout folders on your computer and you want to consolidate them in one place in the library.

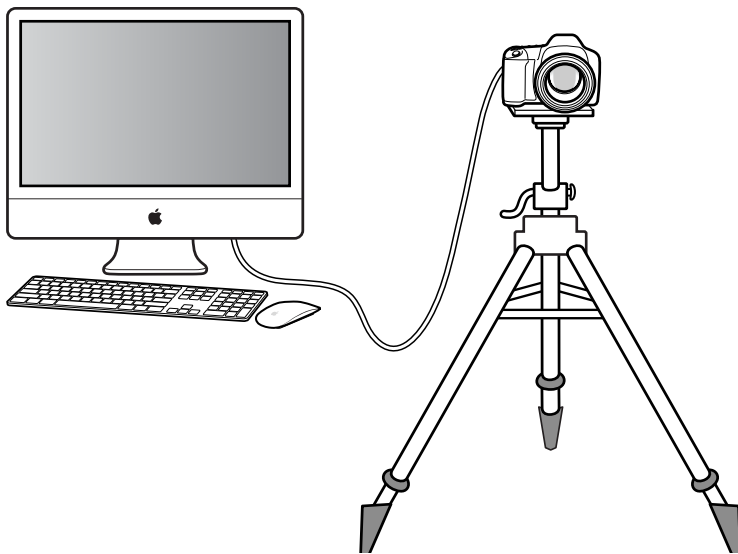
To quickly import files from the Finder

- 1 Select an item in the Library inspector, such as a project or an album, in which to import the photos.
- 2 Locate the image, audio, or video files in the Finder.
- 3 Drag the files to either the selected item in the Library inspector or anywhere in the Browser or Viewer.

The import process begins and an indicator appears next to the project's name, showing the progress of the import.

Capturing Photos as You Work

For certain kinds of shoots, such as product shoots done within your office studio, you may want to immediately see test shots on your computer to check on lighting and other production factors. You can connect your camera directly to your computer and have each shot immediately appear in an Aperture project as you shoot. You can review a photo in detail, make production changes, and then shoot and immediately see the results again. This process is called *tethered shooting*, and it's ideal for checking the details of a shot while setting up the final shot.



Note: For a list of cameras that Aperture supports for tethered shooting, go to <http://support.apple.com/kb/HT4176>. See your camera's manual for information about setting up your camera for tethered shooting.

To use tethered shooting, you first connect your camera to the computer using a USB or FireWire cable. You then select a project for the photos to be stored in. Aperture provides a Tether Settings dialog for specifying your tethered shooting settings, and you can also use this dialog to specify any other import settings (just as you would normally specify import settings in the Import browser).

After starting a session, you can use Aperture to view and capture photos. You use the Aperture Tether HUD to control your camera and take photos as you work.

To set up Aperture for tethered shooting

- 1 Connect your camera to your computer.
- 2 In the Library Inspector, select the project you want the photos captured to.
- 3 Choose File > Tether > Start Session.
- 4 Specify import settings.

For information, see [Importing from Your Digital Camera or Card Reader](#) on page 53.

- 5 Click Start Session.

The Tether HUD appears.

- 6 Do one of the following:
 - *To begin the capture session:* Click Capture.
 - *To stop capturing photos:* Click Stop Session.

Importing Folders of Files from the Finder

If you've spent time organizing your image, video, and audio files into a meaningful hierarchy on your computer and you want to keep that organization, you can import a folder of files as a project or drag it directly into the Library inspector. When you import a folder of files or drag it into the Library inspector, the top folder becomes a folder in the Library inspector and any subfolders become projects within the folder.

To import a folder of files from the Finder using the Import command

- 1 Choose File > Import > Folders as Projects.
- 2 Select the folder of photos that you want to import. You can select multiple folders to import by Shift-clicking them.
- 3 Do one of the following:
 - *To import the top-level folder as a folder in the Aperture library and all of its subfolders as individual projects:* Choose Folders and Projects from the Import Folders As pop-up menu.
 - *To import the top-level folder as a project and all its subfolders as albums:* Choose Projects and Albums from the Import Folders As pop-up menu.

- 4 Choose a location for the imported photos by doing one of the following:
 - *To store imported originals in the Aperture library:* Choose “In the Aperture Library” from the Store Files pop-up menu.
 - *To import the files as referenced images stored in their current location on your hard disk:* Choose “In their current location” from the Store Files pop-up menu.
 - *To store imported originals as referenced images in the Pictures folder on your hard disk:* Choose Pictures from the Store Files pop-up menu, then choose whether you want the files moved or copied to the Pictures folder by clicking the “Move files” or “Copy files” button.
 - *To store imported originals as referenced images in a location other than the Pictures folder:* Choose “Choose” from the Store Files pop-up menu and select a folder. Choose “No folder” from the Subfolders pop-up menu to specify that the files be stored as separate, individual files in the selected folder. You can also specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files. For more information about creating folders to hold your imported photos, see [Importing Originals for Referenced Images into Folders](#) on page 72. Choose whether you want the image files moved or copied to the new location by clicking the “Move files” or “Copy files” button.
- 5 Choose a naming convention from the Version Name pop-up menu to specify how you want the photos named.

For example, choose Original File Name from the Version Name pop-up menu to have your files stored using the original filenames from your camera or card. Choose a name format from the Version Name pop-up menu to have your photos stored using a specified name. If you choose a custom name format, enter a name in the Name Text field. Choose Edit from the Version Name pop-up menu to define a new naming scheme. For more information about naming files, see [Automatically Naming Your Imported Photos](#) on page 60.

Click the “Apply to Original filenames” checkbox to rename the original files as well.

- 6 Choose how you want Aperture to import RAW + JPEG pairs from the RAW + JPEG pop-up menu. For more information about importing RAW + JPEG pairs, see [Importing RAW + JPEG Image Pairs](#) on page 67.
- 7 Click Import.

The top-level folder in the selection either appears as a folder or is converted to a project based on the option you chose from the Import Folders As pop-up menu. If the folder you imported contains a hierarchy of subfolders and photos, the subfolders appear as albums.

To drag folders into Aperture

When you drag folders into the Library inspector, Aperture uses the last import settings you specified to determine how the folders are imported and where they are stored.

- 1 In the Finder, locate the folder containing the containing the folders, video files, and audio files you want to import.
- 2 Drag the folder to the Library inspector.

Importing Originals for Referenced Images into Folders

When you import photos as referenced images, you can have Aperture place their originals individually into a selected folder or create subfolders to hold the files. For example, you might have the imported image files placed in subfolders identified by date. You can create folder name format presets that you can quickly choose to select the folder name format you prefer.

To create a folder name format, you select the name elements in the Folder Naming Presets dialog. You can specify a combination of name elements to create custom folder names. You can compose folder name formats that combine the following name elements:

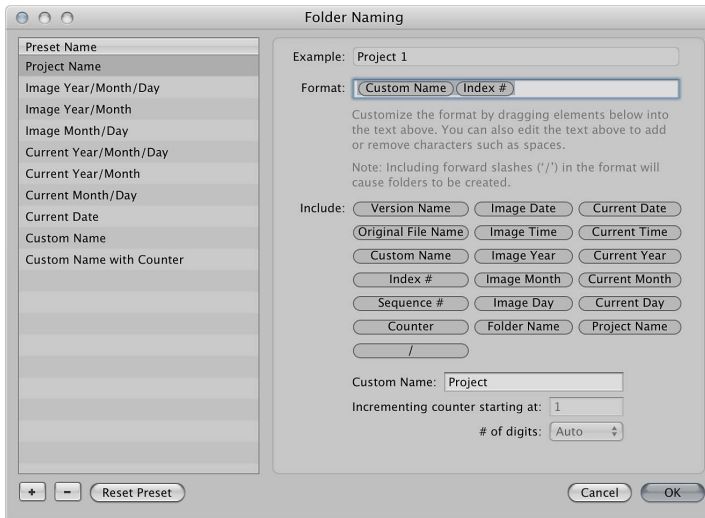
- Version Name
- Original File Name
- Sequence Number (1 of 5, 2 of 5, 3 of 5, and so on)
- Image Year
- Image Month
- Image Day
- Image Date
- Image Time
- Index Number (1, 2, 3, and so on)
- Custom Name
- Counter (001, 002, 003, and so on)
- Current Date
- Current Time
- Current Year
- Current Month
- Current Day
- Folder Name
- Project Name

You can also create a hierarchy of folders within folders. For example, you can specify that Aperture place your referenced images in a subfolder named Date, and within that folder you can create subfolders identified by the time the photo was taken.

To create a custom folder name format

- 1 In the Import browser, choose Pictures or another folder from the Store Files pop-up menu, then choose Edit from the Subfolder pop-up menu that appears.

The Folder Naming dialog appears.



- 2 Click the Add (+) button to create a new name format, or select the preset name format you want to change.
- 3 Drag name elements into the Format field in the order you want them to appear.
- 4 Drag a slash between the elements where you want subfolders created.
- 5 Enter a custom name in the Custom Name field, if you like.
- 6 Click OK.

Your new folder name format now appears in the Subfolders pop-up menu.

To reset the starting number of a counter in a folder name format

When using a counter in your folder name format, you can specify the starting number and the number of digits, from one to six, that appear in the counter. When you use a folder name format with a counter, reset the initial starting number. Otherwise, on the next import, Aperture will continue numbering the image folders starting from the last number of the previous import.

- In the Folder Naming Presets dialog, type "0" (zero) in the "Incrementing counter starting at" field.

Where Aperture Stores Your Managed Files in the Library

You can always view and work with your photos within the Aperture application. However, you may wonder where your managed image files physically reside in the Aperture library on the computer's hard disk. By default, your photos are stored in the Aperture Library file within the Pictures folder. For more information about managed image files, see [What Are Managed Images and Referenced Images?](#) on page 28.

You can open and see the contents of the Aperture Library file in the Finder by Control-clicking the file and choosing Show Package Contents from the shortcut menu. However, it's not recommended that you access or work with your originals in this way because you risk interfering with the Aperture library.

WARNING: You should always back up and work with your managed images and projects from within the Aperture application. If you move or accidentally change the files stored in the Aperture Library file, Aperture may not be able to locate your projects and the media they contain. Making a change to a managed file in the Finder, such as renaming it, creates changes that Aperture cannot track.

Adding Audio Attachments to Image Files

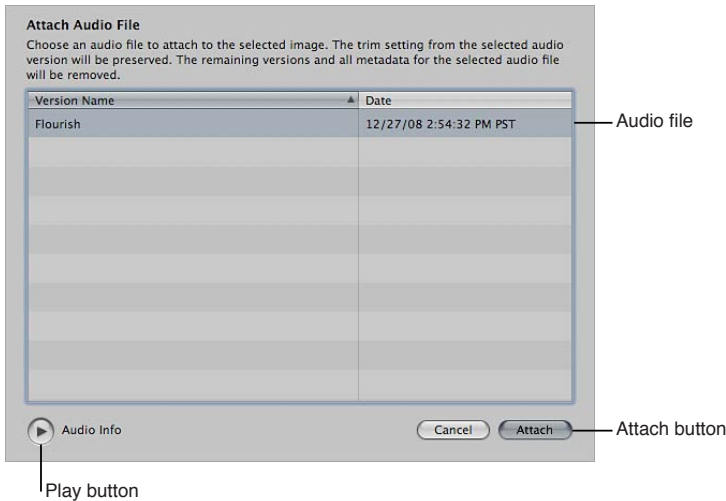
Although the audio files of photos with audio attachments are automatically imported into Aperture when the filenames match, you can also manually attach an audio file to a photo after it has been imported into Aperture. There are two ways to attach an audio file to a photo. If the project selected in the Library inspector contains an original audio file, you can attach the audio file to a photo in the project using the Info inspector. If the audio file is outside of the Aperture library, you can drag the audio file from the Finder to the photo in the Viewer.

Note: For a list of file formats that can be used for audio attachments in Aperture, go to <http://www.apple.com/aperture/specs>.

To add an audio attachment using the Info inspector

- 1 In the Library inspector, select a project containing the audio file you want to attach.
- 2 In the Browser, select the photo you want to attach the audio file to.
- 3 In the Info inspector, choose Attach Audio File from the Metadata Action pop-up menu.
- 4 In the dialog that appears, select the audio file you want to attach, then click Attach.

You can preview the selected audio file by clicking the Play button.



The audio attachment is added to the photo, and the audio file's thumbnail disappears from the Browser. A badge appears on the lower-right portion of the photo, indicating that an audio file is attached. For more information about playing audio attachments, see [Viewing and Changing Metadata in the Info Inspector and Inspector HUD](#) on page 183.

To add an audio attachment to a photo via drag and drop

- 1 If necessary, click the Split View button in the toolbar, and then select the photo you want to attach the audio file to in the Browser.
- 2 In the Finder, select the audio file you want to attach.
- 3 Drag the audio file to the photo you want to attach it to in the Viewer.

The photo is surrounded with a green outline, indicating that the file is about to be attached.

The audio attachment is added to the photo in Aperture. A badge appears on the lower-right portion of the photo, indicating that an audio file is attached. For more information about playing audio attachments, see [Viewing and Changing Metadata in the Info Inspector and Inspector HUD](#) on page 183.

To remove an attachment from a photo

- 1 In the Browser, select the photo whose attachment you want to remove.
- 2 In the Info inspector, choose Detach Audio File from the Metadata Action pop-up menu.

The audio file is detached and placed in the same project as the photo it was attached to.

Reprocessing Photos from Previous Versions of Aperture

An Overview of Reprocessing Photos

Aperture provides image processing algorithms that deliver improved image quality. With improved default rendering of RAW images from supported cameras, Aperture 3 provides significantly enhanced image quality with improvements in noise reduction, sharpening, and highlights recovery.

To maintain the image integrity of the existing photos in your Aperture library, Aperture allows you to retain the original processing of your photos from previous versions, selectively process images using the most current RAW image processing, or create duplicate versions of each original image file with the most current RAW image processing applied. However, some adjustments and brushed adjustments are not available unless the selected photo uses the most current RAW image processing.

Strategies for Reprocessing Photos

When you start using Aperture 3.4, all of your existing photos continue to use the previous version's image processing, in order to preserve their appearance. Any of these photos can be individually reprocessed to use the most current image processing. You can also use the Reprocess Originals command in the Photos menu to reprocess selected photos, projects, books, slideshows, webpages, web journals, Light Table albums, albums, and Smart Albums.

Reprocessing a large number of photos can be a time-consuming process. Therefore, you may find it easier to reprocess photos on an as-needed basis. For example, if you have five-star selects, you may decide to initially reprocess only those photos. Photos are not affected by being reprocessed more than once; if a photo already uses the most image processing, reprocessing it has no effect.

Reprocessing a Photo Selection

You can reprocess all photos, reprocess only photos with adjustments, or reprocess only photos without adjustments. You can also reprocess photos one at a time using the RAW Fine Tuning controls in the Adjustments inspector or the Adjustments pane of the Inspector HUD. For more information, see [Reprocessing Photos Individually](#) on page 78.

To reprocess a selection of photos

- 1 Select a photo or a group of photos.
- 2 Choose Photos > Reprocess Originals.
- 3 In the dialog that appears, select the appropriate reprocessing criteria, then click the Reprocess Photos button.



The image files are reprocessed from the earlier image process to the most current image processing, according to the criteria you specified.

To reprocess a project or an album

You can reprocess all the photos in a selected project, book, slideshow, webpage, web journal, Light Table album, album, or Smart Album.

- 1 In the Library inspector, select a project or album.
- 2 Choose Photos > Reprocess Originals.
- 3 In the dialog that appears, select the appropriate reprocessing criteria, then click the Reprocess Photos button.

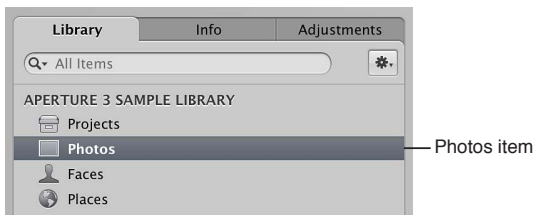


All photos in the selected project or album are reprocessed using the most current image processing.

To reprocess every photo in the library

If you like, you can reprocess all the photos in the library at once. However, this process may take a long time for large libraries.

- 1 In the Library inspector, select the Photos item.



- 2 Choose Photos > Reprocess Originals.
- 3 In the dialog that appears, select the appropriate reprocessing criteria, then click the Reprocess Photos button.



Every photo in the library is reprocessed using the most current image processing.

Important: Reprocessing thousands of image files can be a lengthy operation. Make sure to set aside a significant amount of time for Aperture to process the image files—preferably when you don't need to use your Aperture system.

Reprocessing Photos Individually

You can reprocess photos one at a time using the Adjustments inspector or the Adjustments pane of the Inspector HUD.

To reprocess an individual photo

- 1 Select a photo.
- 2 In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose RAW Fine Tuning from the Add Adjustment pop-up menu.
- 3 In the RAW Fine Tuning controls, click the Reprocess button.

Note: If the Reprocess button does not appear in the Adjustments inspector or the Adjustments pane of the Inspector HUD, the photo has already been reprocessed using Aperture 3 image processing.

The photo is reprocessed using the most current image processing.

Working with Photos in the Browser

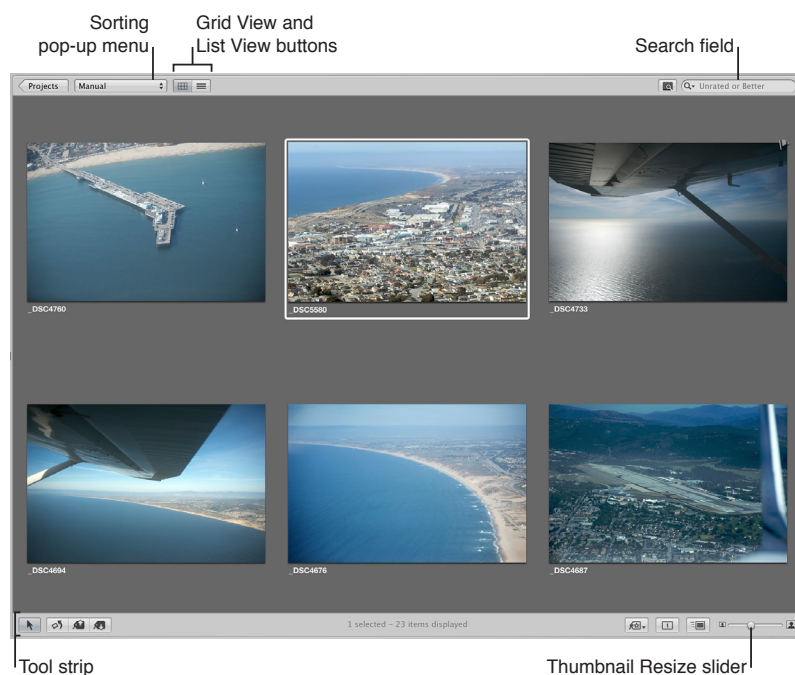
4

An Overview of the Browser

After a shoot, you may need to sort through hundreds or even thousands of photos in a project. Aperture provides efficient methods for increasing your productivity when working with large numbers of photos.

The Browser provides the principal environment for viewing, selecting, and working with photos. You can quickly search for a photo in a project, reorder and sort photos, rotate photos to portrait or landscape orientation, create new versions, and delete photos.

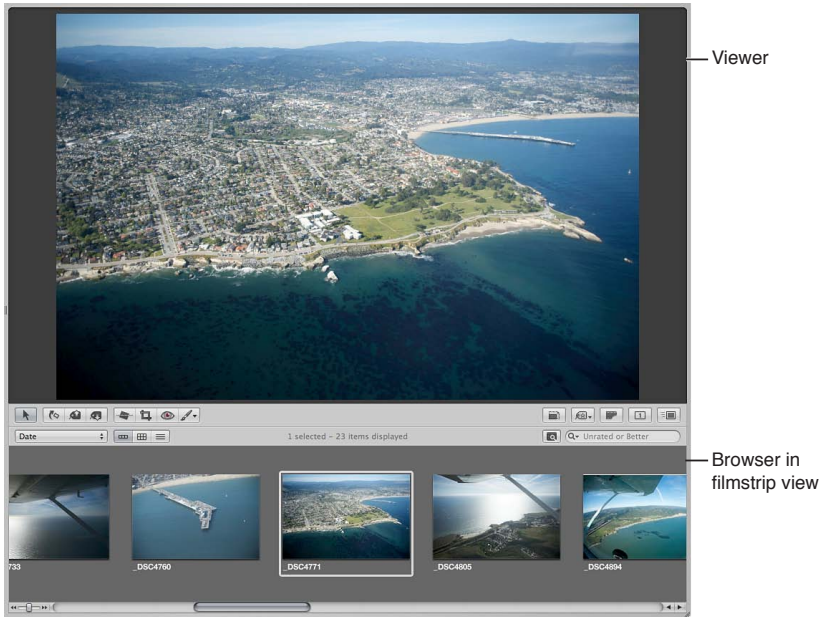
When you select a project, folder, or album in the Library inspector, thumbnails of its photos appear in the Browser. You select photos in the Browser to work with them. You can move and rearrange photos, rotate photos, make new versions, and delete photos from a project.



Aperture provides fast and efficient ways of selecting photos. You can use the arrow keys to quickly select a photo or multiple photos to work on. You can also select photos by clicking, dragging a selection rectangle, and using keyboard shortcuts. If using Aperture with a trackpad, you can use the swipe gesture to select photos. For more information about using gestures with Aperture, see [Using Gestures with Aperture](#) on page 599.

You can display photos in the Browser in filmstrip view, grid view, and list view.

When you select filmstrip view, the Browser changes to a single row of photos that you can select and navigate through, and selected photos appear in the Viewer.



Grid view organizes thumbnails of your photos in a grid pattern. Use grid view when it's easiest to identify your photos by sight and work with thumbnails as you organize, stack, or assign keywords to photos.

List view displays a list of your photos with associated file information. Use list view when you need to see or sort your photos by corresponding file properties such as image date, file size, or rating.



List view is a great way to quickly see information about your files. You can also use list view to sort your photos by any of the column categories. Click a column heading to sort your photos by that category.

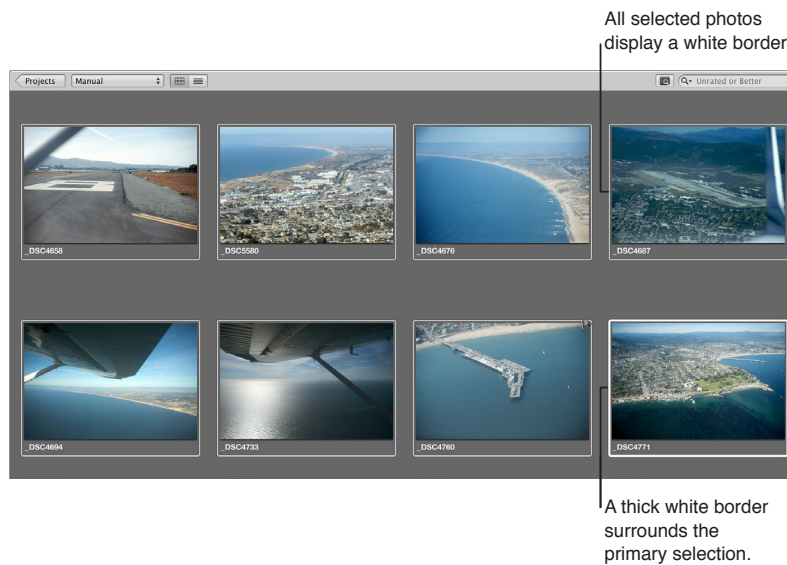
You can also customize the information that appears with your photos. For example, you can set your photos to appear with the filename as well as the IPTC data and EXIF data. You can change what information appears in the Browser in grid view, list view, and filmstrip view by customizing the Metadata options in the Preferences window. For more information, see [Displaying Specific Metadata with Your Photos](#) on page 105.

If you make a mistake while editing, in most cases you can choose the Undo command to immediately cancel your last action. In fact, you can choose the Undo command multiple times to undo your last series of actions. Aperture places deleted originals in the Aperture Trash. If you discover a deletion you did not intend to make, and the Undo command cannot recover the deletion, you can still recover the original from the Aperture Trash until the Trash is emptied.

Navigating Through and Selecting Photos

Navigating Through Photos in the Browser

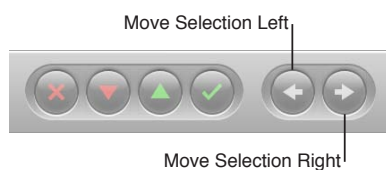
You can select one or several of the photos in the Browser to work with them or to view them in the Viewer. Aperture identifies the photos you've selected by displaying them with a white border. When you select a group of photos, the actively selected photo, called the *primary selection*, appears with a thick white border and the rest of the selected photos appear with thin white borders.



To navigate through photos

Do one of the following:

- Press an arrow key to move left, right, up, or down.
- Use the scroll bar to scroll through the photos in the Browser, then click the photo you want to view.
- Choose Window > Show Control Bar to display the control bar. In the control bar, click the Move Selection Left or Move Selection Right button.



Selecting Photos

Selecting photos is a fundamental task in Aperture. Knowing the many ways you can select photos can help increase your productivity and satisfaction while working with your photos.

You can select photos in the following ways.

Task	Action
Select a single photo	<ul style="list-style-type: none">• Click the photo.• Press the arrow keys to navigate to the photo.
Select a range of photos	<ul style="list-style-type: none">• Select the first photo, then choose Edit > Select to End (or press Shift-End) to extend the selection to the last photo in the Browser.• Select the last photo in a range, then choose Edit > Select to Beginning (or press Shift-Home) to extend the selection to the first photo in the Browser.• Click the first photo in a range, then Shift-click the last photo.• Press the arrow keys to select the first photo, then press Shift and an arrow key to select the last photo in the range.• Drag a selection rectangle to select all the photos that fall within the rectangle.
Select a photo among selected photos	<ul style="list-style-type: none">• Press Semicolon (;) or press Command-Option-Left Arrow to select the previous photo in the selection. Press Apostrophe (') or press Command-Option-Right Arrow to select the next photo in the selection.
Select a photo in a stack	<ul style="list-style-type: none">• Press the Right Arrow or Left Arrow key.
Select nonadjacent photos	<ul style="list-style-type: none">• Command-click the photos you want to select. Command-click the photos again to deselect them.
Slide a selection	<ul style="list-style-type: none">• Press Command-Left Arrow or Command-Right Arrow to slide the current selection over by one photo. For example, you can move a three-photo selection left or right by one photo at a time.
Select the next stack	<ul style="list-style-type: none">• With a stack selected, press Option-Page Up or Option-Page Down.
Select or set a compare photo	<ul style="list-style-type: none">• Select the photo, then press Option-O.
Deselect the compare photo	<ul style="list-style-type: none">• Press Command-Return.
Select a different compare photo	<ul style="list-style-type: none">• Select the photo you want as a compare photo, then press Return.
Select all photos in the Browser	<ul style="list-style-type: none">• Choose Edit > Select All (or press Command-A).
Select only the primary photo, deselecting all others	<ul style="list-style-type: none">• Choose Edit > Reduce Selection (or press Shift-E).
Deselect all photos in the Browser	<ul style="list-style-type: none">• Choose Edit > Deselect All (or press Command-Shift-A).• Click the gray background of the Browser.

Navigating Through Photos in Quick Preview Mode

As you work with photos in the Browser and Viewer, you can set Aperture to display JPEG representations of the photos called *previews*. Because the preview's file size is smaller than that of the original photo, Aperture can display the photo more quickly. For example, the thumbnails in the Browser are preview representations of the originals, reduced to thumbnail size.

Likewise, when you select a photo in the Viewer, Aperture first displays a preview photo as it reads the larger original on disk. It then displays the full original once the image is decoded. This process of displaying the previews and then the originals can be nearly instantaneous, or, depending on the size of your originals, there can be a short delay in the final display.

For more information about creating and working with previews, see [An Overview of Preview Images](#) on page 118.

To speed up the access and display of photos, you can turn on Quick Preview mode. In Quick Preview mode, Aperture displays preview photos only, without reading the larger originals. You can use Quick Preview mode to rapidly move to and select different photos. For example, you might use Quick Preview mode to quickly select and stack photos, add keywords, or change other metadata. When using Quick Preview mode, however, there are some things you can't do, such as make adjustments to photos. In Quick Preview mode, tools and functions that aren't available appear dimmed. Depending on your task, you may find switching to Quick Preview mode a great way to gain speedy access to photos.

To turn on Quick Preview mode

Do one of the following:

- Choose View > Quick Preview (or press P).
- Click the Quick Preview button in the tool strip.

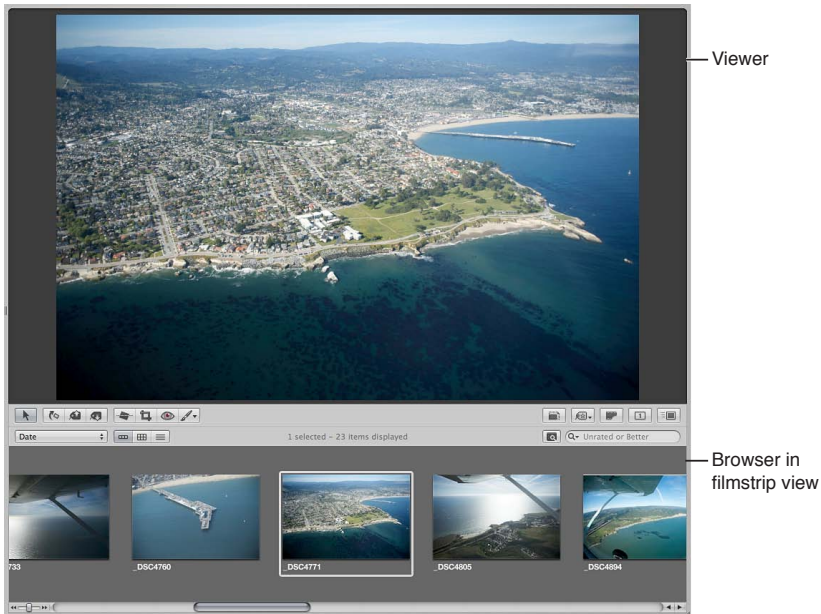


The Quick Preview button in the tool strip turns yellow, and the border around the photo selection in the Browser changes from white to yellow.

Working with Browser Views

Working with Photos in Filmstrip View

Filmstrip view is the default view for the Browser. You can use filmstrip view in combination with the Viewer to quickly scroll from photo to photo, making changes and comparing photos. For example, you can select several photos in a row, group them in a stack, apply ratings, and compare them side by side in the Viewer. You can use the Right Arrow and Left Arrow keys to quickly move from photo to photo, and you can use the scroll bar and the Shuttle control to scroll through photos. You can resize the thumbnails in the filmstrip by dragging the top of the filmstrip to enlarge its area.



To switch to filmstrip view

Do one of the following:

- Choose View > Browser > Filmstrip (or press Control-F).
- Click the Filmstrip View button in the Browser.



Note: The main window must be set to the Split View layout in order to access the filmstrip in the Browser. When the main window is set to Browser, the Filmstrip View button disappears.

To shuttle continuously through the photos in filmstrip view

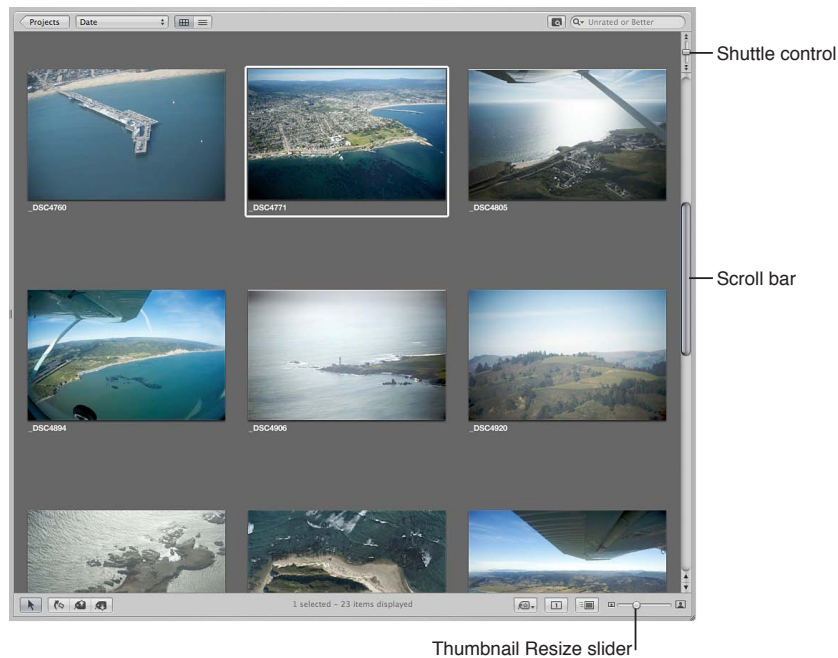
- Press J to shuttle left, press K to stop shuttling, or press L to shuttle right.

Note: Pressing J or L multiple times increases the shuttle speed.

Working with Photos in Grid View

Grid view displays the photos in your selection in the Library inspector as a grid of thumbnails in the Browser. You can use grid view when you want to review large thumbnail photos quickly. Setting the Aperture main window to show the Browser by itself provides the maximum amount of space to dedicate to viewing thumbnails. You may want to adjust the size of the thumbnails to a size convenient for selecting and working with them. If your selection in the Library inspector has many photos, you can also use the Shuttle control or the scroll bar to scroll through the photos.

For more information about setting the Aperture main window to show the Browser by itself, see [Choosing a Workspace View](#) on page 88.



To switch to grid view

Do one of the following:

- Choose View > Browser > Grid (or press Control-G).
- Click the Grid View button in the Browser.



To adjust the thumbnail size

- Drag the Thumbnail Resize slider to increase or decrease the size of the thumbnails.

To shuttle continuously through the photos in grid view

- Press J to shuttle left, press K to stop shuttling, or press L to shuttle right.

Note: Pressing J or L multiple times increases the shuttle speed.

To lighten or darken the background of the Browser

Depending on your work preferences, you may want to lighten or darken the background that your thumbnails appear against in the Browser. The darker the background, the less it interferes with the colors in your photo. It's a good idea to set the background to a dark color when performing color adjustments to your photo. You can darken the background from shades of gray all the way to black, or lighten it from gray to white.

- 1 Choose Aperture > Preferences, or press Command-Comma (,).
- 2 In the Preferences window, click Appearance and drag the Browser Background Brightness slider to lighten or darken the background, then close the window.

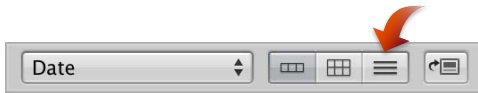
Working with Photos in List View

Instead of displaying thumbnails, list view displays photos by name and icon with accompanying information such as rating, image dimensions, file size, and date.

To switch to list view

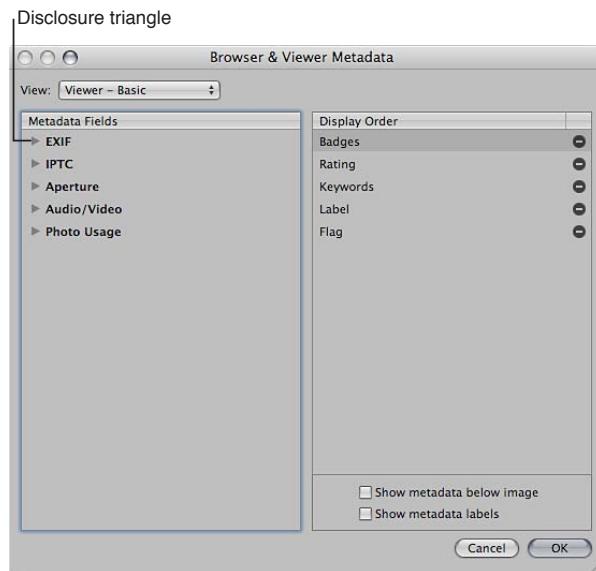
Do one of the following:

- Choose View > Browser > List (or press Control-L).
- Click the List View button in the Browser.



To choose what type of information is displayed in list view

- 1 Choose View > Metadata Display > Customize (or press Command-J).
- 2 In the Browser & Viewer Metadata dialog, choose a list view option from the View pop-up menu.

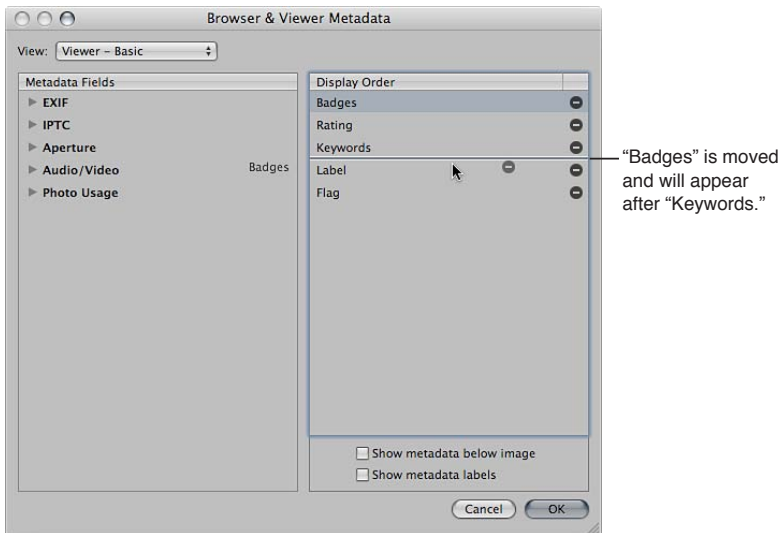


- 3 In the Metadata Fields column, click the disclosure triangles next to the main groups of metadata to reveal the options within them.
- 4 Specify the type of metadata that appears in list view by selecting the checkboxes corresponding to each type. Deselect the checkboxes for metadata items you want to remove.

Each metadata item selected in the Metadata Fields column in the Browser & Viewer Metadata dialog appears as a column in list view.

- 5 If necessary, rearrange the order in which the metadata columns are displayed by dragging the metadata items up or down in the Display Order column.

The order of metadata selections in the Display Order column from top to bottom corresponds to the order of columns in the Browser in list view from left to right. Moving an item up in the Display Order column moves the metadata column to the left in list view.

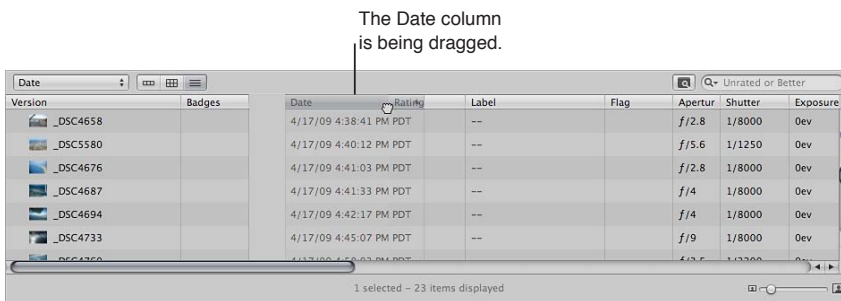


- 6 When you are satisfied with your metadata selections and the order in which they will be displayed in list view, click OK.

To rearrange the metadata columns in list view

You can rearrange the metadata columns to keep the most important information in view.

- Select the column's header and drag the column to a new position.



To sort photos in list view by a category

One of the main advantages of list view is that you can quickly sort photos based on a category of information. When you click a column heading in list view, Aperture reorders the photos, sorting them by that category. For example, you might sort your photos by date.

- Click the category column heading in the Browser.

Photos in list view
sorted by date

Version	Badges	Rating	Label	Flag	Aperture	Date	Shutter	Exposure
_DSC4658			--		f/2.8	4/17/09 4:38:41 PM PDT	1/8000	0ev
_DSC5580			--		f/5.6	4/17/09 4:40:12 PM PDT	1/1250	0ev
_DSC4676			--		f/2.8	4/17/09 4:41:03 PM PDT	1/8000	0ev
_DSC4687			--		f/4	4/17/09 4:41:33 PM PDT	1/8000	0ev
_DSC4694			--		f/4	4/17/09 4:42:17 PM PDT	1/8000	0ev
_DSC4733			--		f/9	4/17/09 4:45:07 PM PDT	1/8000	0ev
_DSC4760			--		f/2.8	4/17/09 4:48:03 PM PDT	1/3200	0ev

To enlarge the thumbnail icons in list view

When you work in list view, it may sometimes be difficult to determine the content of a photo based on the file information. You can enlarge the thumbnail icons that appear in list view to give you a better look at the photos.

- Drag the Thumbnail Resize slider to increase or decrease the size of the icons.

To rename a photo version in list view

You can easily rename files after importing them. When you rename a file, you are renaming the photo version, not the original. The filename of the original does not change.

- Select a photo, then double-click the photo's version name and enter a new name.

Choosing a Workspace View

You can easily change the layout of the Aperture main window to match your workspace preferences and workflow. You can work with the Browser filling the main window, with the Browser in combination with the Viewer, or with only the Viewer open.

When you work with the Browser and Viewer together, you can reposition the Browser on the screen. For example, you can rotate the Browser to the side. You can also swap the position of the Viewer and Browser.

To work with the Browser filling the main window

Do one of the following:

- Choose View > Browser.
- Click the Browser button in the toolbar.

To work with the Browser and Viewer together in the main window

Do one of the following:

- Choose View > Split View.
- Click the Split View button in the toolbar.

To work with the Viewer only

Do one of the following:

- Choose View > Viewer.
- Click the Viewer button in the toolbar.

Tip: To quickly change workspace views, press the V key repeatedly until you see the view you want to work in.

To rotate the position of the Browser

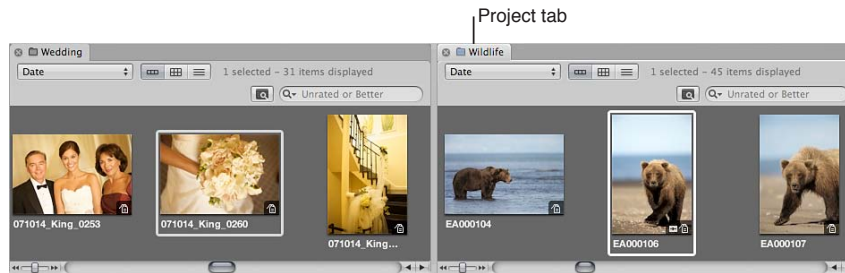
- Choose View > Browser > Rotate Position (or press Shift-W).

To swap the position of the Browser and the Viewer

- Choose View > Browser > Swap Position (or press Option-W).

Working with Two or More Browsers Open

You can work with two items in the Library inspector open at once, splitting the Browser into a separate pane for each item.



When you select an item in the Library inspector and then Option-click a second item, Aperture splits the Browser into two panes and shows thumbnails for both items. You can select photos in either pane and see the selections in the Viewer. You can also set different display options for each pane. For example, one pane may show photos in grid view and the other in list view. You may find that working with multiple Browser panes open allows you to easily copy or transfer the contents of one item in the Library inspector to another. You can also open multiple items in the Library inspector and display their contents in a single Browser. For more information about opening and closing multiple projects, see [Opening and Closing Items in the Library Inspector](#) on page 34.

Viewing Photos with the Loupe

An Overview of the Loupe

Aperture has a Loupe tool (also called the *Centered Loupe*) that is primarily designed to check the focus and details of image thumbnails in the Browser. Using the Loupe can save you time by preventing you from having to open the photo in the Viewer, zoom in to the photo to check details, and then switch back to scanning through image thumbnails in the Browser.

For more information about using the Viewer to zoom in to images, see [Viewing Photos at Full Resolution](#) on page 111.

You can position the Loupe over a portion of the photo you want to magnify. You can also position the Loupe off to the side of the photo and have the Loupe magnify the portion of the photo at the position of the pointer. Then, as you move the pointer, you see specific parts of the photo magnified. In addition to checking a photo's focus, the Loupe is useful for making quick checks for sensor dust, flaws, fingerprints on film scans, and other issues. You can use the Loupe on any photo or thumbnail in the Aperture library.

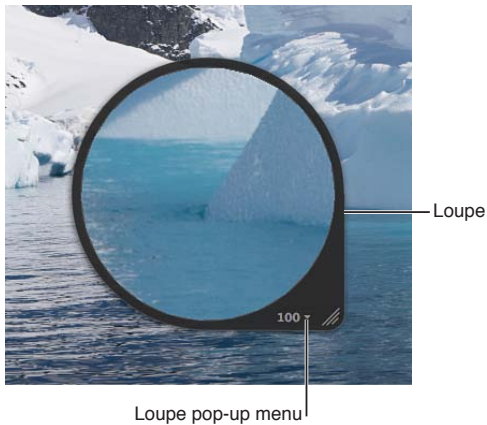
Aperture also provides a second version of the Loupe for your convenience. For more information about using this alternate Loupe, see [Using the Alternate Loupe](#) on page 93.

To show the Loupe

Do one of the following:

- Choose View > Show Loupe, or press the Grave Accent (`) key.
- Click the Loupe button in the toolbar.

The Loupe appears.



To hide the Loupe

Do one of the following:

- Choose View > Hide Loupe, or press the Grave Accent (`) key.
- Click the Loupe button in the toolbar.

Moving the Loupe

You can move the Loupe by dragging it to different locations over a photo.

To move the Loupe

Do one of the following:

- Drag the Loupe's handle.
- Drag within the Loupe.

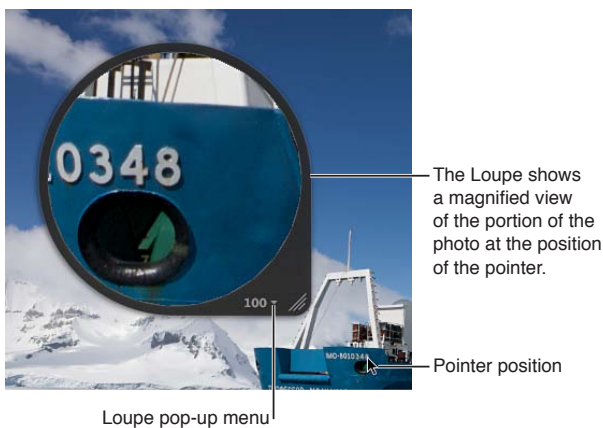
A circle appears that targets the area to be magnified.

- Hold down the Grave Accent key (`) while clicking a specific place on a photo.

The Loupe moves to the part of the photo you clicked.

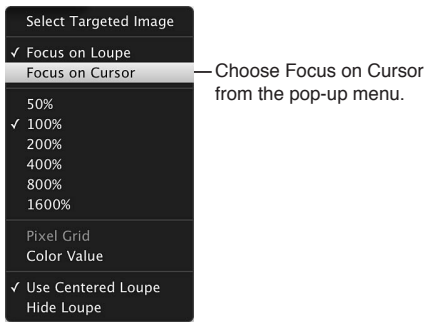
Using the Pointer to Magnify Parts of a Photo

You can leave the Loupe stationary and set it to magnify the portion of the photo at the position of the pointer. Using the pointer to magnify the photo is useful when you don't want the Loupe to cover up the area of the photo you want to magnify.



To use the pointer to magnify parts of a photo

- Choose Focus on Cursor from the Loupe pop-up menu.



To turn off this feature, choose Focus on Loupe from the Loupe pop-up menu.

Changing the Size and Magnification of the Loupe

You can change the size of the Loupe and increase or decrease its magnification level.

To increase the size of the Loupe

Do one of the following:

- Choose View > Loupe Options > Increase Diameter, or press Shift–Option–Plus Sign (+).
- Pull the grip on the Loupe’s handle out.

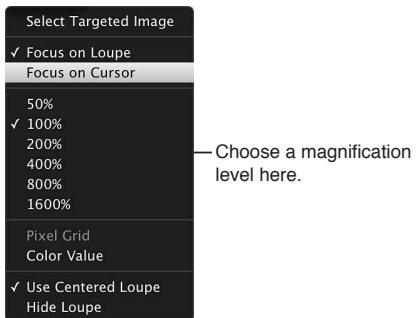
To decrease the size of the Loupe

Do one of the following:

- Choose View > Loupe Options > Decrease Diameter, or press Shift–Option–Underscore (⌘).
- Push the grip on the Loupe’s handle in.

To change the Loupe’s magnification by defined amounts

- Choose a magnification level from the Loupe pop-up menu.



To change the Loupe’s magnification incrementally

- *To increase the Loupe’s magnification:* Choose View > Loupe Options > Increase Zoom, or press Command–Shift–Plus Sign (+).

Press these keys repeatedly to continue increasing the magnification.

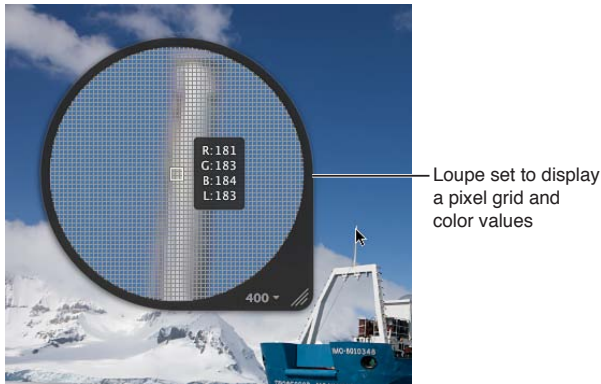
- *To decrease the Loupe’s magnification:* Choose View > Loupe Options > Decrease Zoom, or press Command–Shift–Underscore (⌘).

Press these keys repeatedly to continue decreasing the magnification.

- *To create smooth changes in magnification:* Use the scroll gesture.

Displaying a Pixel Grid and Color Values

You can have the Loupe display a photo as a grid that shows the actual pixel composition of the photo, allowing you to see the individual pixel values at high magnification (400 percent or higher). You can also set the Loupe to display readings of the color values of the photo, showing the RGB (%), RGB (8-bit), Lab, CMYK, HSB, or HSL values chosen for the Color meter.



Loupe set to display a pixel grid and color values

To set the Loupe to show a pixel grid

- 1 Set the Loupe's magnification to 400 percent or higher.

For more information about setting the Loupe's magnification, see [Changing the Size and Magnification of the Loupe](#) on page 91.

- 2 Do one of the following:

- Choose View > Loupe Options > Show Pixel Grid in Loupe.
- Choose Pixel Grid from the Loupe pop-up menu.

To turn off this feature, choose the menu item again.

To turn on the display of color values in the Loupe

Do one of the following:

- Choose View > Loupe Options > Show Color Value in Loupe, or press Shift-Option-Tilde (~).
- Choose Color Value from the Loupe pop-up menu.

To turn off this feature, choose the menu item again.

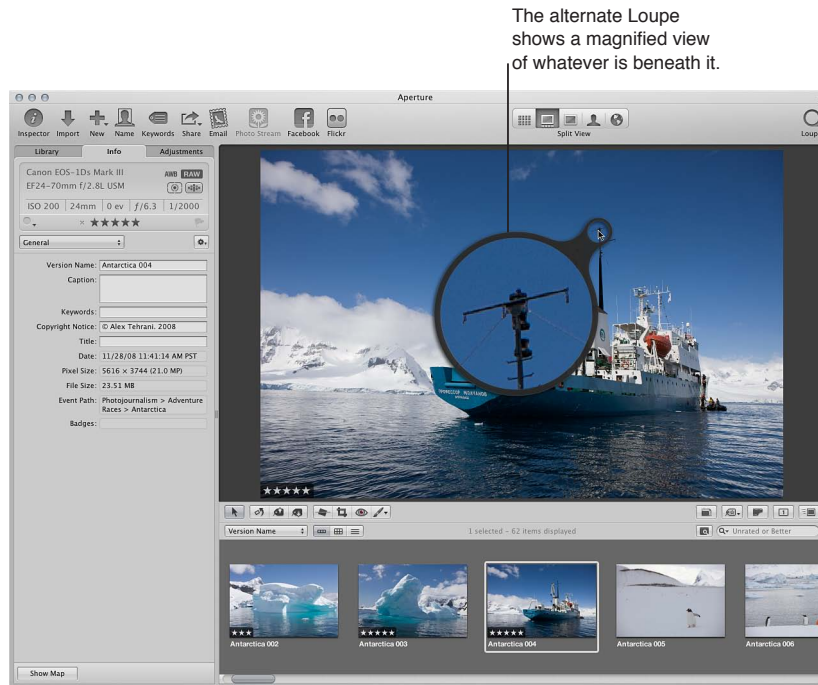
To change the color value option

- In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose a color value option from the Adjustment Action pop-up menu (with a gear icon).

For more information about color values, see [Using the Color Meter and Displaying Camera Information](#) on page 286.

Using the Alternate Loupe

You can also use an alternate Loupe to examine parts of a photo. You position the small ring of the alternate Loupe over the portion of the photo you want to see, and the large ring shows a magnified view. Depending on the details in the photo, you can change the size of the alternate Loupe and increase or decrease its magnification level. It's useful for making quick checks for dust specks, flaws, fingerprints, or other issues. You can use the alternate Loupe on any photo or thumbnail in the Aperture library.



To show the alternate Loupe

- 1 Do one of the following:
 - Choose View > Show Loupe, or press the Grave Accent (`) key.
 - Click the Loupe button in the toolbar.
- 2 Choose View > Loupe Options > Use Centered Loupe to turn off the display of the regular Loupe. The checkmark next to the Use Centered Loupe menu item disappears.

To reduce the size of the alternate Loupe

- Choose View > Loupe Options > Decrease Diameter, or press Shift-Option-Underscore (_).

To increase the size of the alternate Loupe

- Choose View > Loupe Options > Increase Diameter, or press Shift-Option-Plus Sign (+).

To increase the magnification of the alternate Loupe

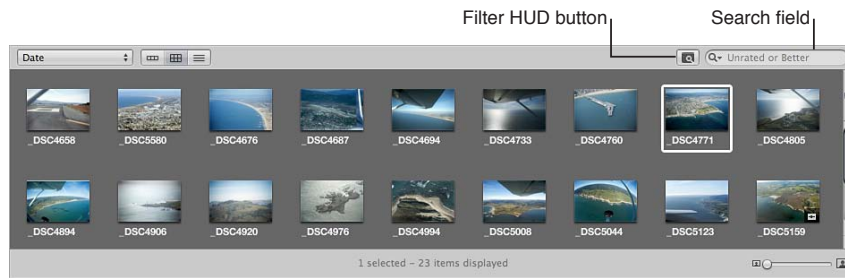
- Press Command-Shift-Plus Sign (+).
Press these keys repeatedly to continue increasing the magnification.

To decrease the magnification of the alternate Loupe

- Press Command-Shift-Underscore (_).
Press these keys repeatedly to continue decreasing the magnification.

Searching for Photos in the Browser

When you have more photos than the Browser can display at one time, you can use the search field to locate photos. Enter the search criteria in the search field, and Aperture finds the photo or photos for you, removing all others from view.



When you search for photos in the Browser, the search is confined to the selection in the Library inspector. For example, if you shot several hundred photos for a wedding event but want to view only those that have the keyword *Bride*, you select the wedding project in the Library inspector and then enter *Bride* in the Browser's search field to display only the photos of the bride, hiding the remainder from view.

When viewing the contents of albums (including Smart Albums) in the Browser, you may not be able to see photos with a rating of Reject. This is because the Browser is set to show unrated photos or better. To view rejected photos, you must set the Browser to show all photos.



You can also filter the photos shown in the Browser by criteria other than ratings. For example, you can filter photos by whether they've been flagged or assigned a color label.

Important: Search criteria set in the Aperture Browser filters photos only within Aperture. If you open your Aperture library in iPhoto, all photos are shown.

To search for a photo in the Browser

- Enter text associated with that photo in the Browser's search field.

To see all your photos again

- Click the search field's Reset button (with an X) or delete the text in the search field.

Important: You can use keyboard shortcuts to quickly implement a search that displays photos with specific ratings or photos that have a specific keyword. It's possible, while working with photos, to accidentally press such a keyboard shortcut and see photos on your screen unexpectedly change or even disappear. If this happens, you can quickly display your photos by clicking the Reset button in the search field to reset the search criteria in the Filter HUD.

To set the Browser to show all photos

- 1 In the Library inspector, select an item.
- 2 In the Browser, choose Show All from the search field pop-up menu.

All photos, including rejects, appear in the Browser, and Showing All appears in the Browser's search field.

To set the Browser to show rejected photos only

- 1 In the Library inspector, select an item.
- 2 In the Browser, choose Rejected from the search field pop-up menu.

Only photos with the Reject rating appear in the Browser, and X appears in the Browser's search field.

To set the Browser to show flagged photos only

- 1 In the Library inspector, select an item.
- 2 In the Browser, choose Flagged from the search field pop-up menu.

To set the Browser to show photos assigned a specific color label

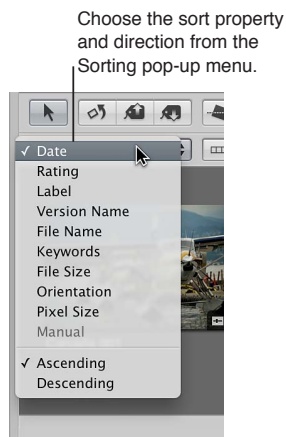
- 1 In the Library inspector, select an item.
- 2 In the Browser, choose a color label from the search field pop-up menu.

Rearranging and Sorting Photos in the Browser

As you work with photos in the Browser, you can move and rearrange them into any order or grouping you like. For example, you might want to keep all related photos of a wedding project, such as the cake cutting, in close proximity to allow you to easily sort through the best ones and then adjust them.

You can drag photos to new locations in the Browser. When you drag photos to new locations, you create a custom arrangement of your photos, and the Sorting pop-up menu changes to show the Manual option. Aperture records the order of your photos, and whenever you choose Manual from the Sorting pop-up menu, your photos reappear in that order.

You can also change the order of photos in the Browser based on photo properties such as filename, file size, date, color label, rating, and more. For example, when displaying photos by filename, Aperture places the photos in alphabetical order. You might also order the photos by date or time. You choose the sort property from the Sorting pop-up menu in grid view, list view, and filmstrip view.



To rearrange photos in the Browser

- Drag the photos you want to rearrange to a new location; when the green bar appears, release the mouse button.

To restore a manual arrangement of your photos in the Browser

- Choose Manual from the Sorting pop-up menu.

Aperture remembers the last time you moved photos and restores that arrangement.

To change the displayed order of photos in the Browser

- Choose a sort property from the Sorting pop-up menu. Choose Ascending or Descending to specify an ascending or descending sort order.

Rotating Photos

When photos are imported into a project, some may be displayed in an incorrect orientation, requiring you to rotate them. The tool strip provides a Rotate tool for rotating selected photos counterclockwise. You can rotate photos individually or select a group and rotate them all at once. You can also select photos and quickly rotate them using keyboard shortcuts.

To rotate photos individually

Do one of the following:

- Select the photo you want to rotate, then choose Photos > Rotate Counterclockwise (or press Command-[]), or choose Photos > Rotate Clockwise (or press Command-]).
- Select the Rotate tool in the tool strip, then click a photo to rotate it counterclockwise.



- Select the Rotate tool in the tool strip, then Option-click the photo to rotate it clockwise.

To rotate a group of selected photos

Do one of the following:

- Select a group of photos, then choose Photos > Rotate Counterclockwise (or press Command-[]), or choose Photos > Rotate Clockwise (or press Command-]).
- Select a group of photos, then click the Rotate tool in the tool strip.



Tip: To rotate the photos clockwise, hold down the Option key while clicking photos with the Rotate tool.

Creating Versions of a Photo

Occasionally, you may want to make a second version of a photo. For example, you might want to create another version of a photo and apply different exposure settings or other adjustments, or change it for a specific use, such as for placement in a webpage or book.

When you create a new photo version, you can duplicate either the original image or the currently selected version with any changes you've made. For example, if you've made a series of adjustments to a photo and now you want to start from the original photo and make different adjustments, you can duplicate the original and start with a fresh, unchanged photo. In contrast, if you plan to use the same adjustments in multiple versions, you can make those adjustments first and then duplicate the version with the adjustments applied.

To create a new version from an original

- 1 Select the photo you want to duplicate.
- 2 Choose Photos > New Version From Original (or press Option-G).

To duplicate the selected photo version

- 1 Select the photo you want to duplicate.
- 2 Choose Photos > Duplicate Version (or press Option-V).

Deleting Photos from the Browser

If necessary, you can delete versions and even originals.

When deleting photos, you can:

- Remove a version of the photo from an album, leaving any other versions in their original locations in the library
- Delete versions from within a stack
- Delete originals

To remove a version from an album

- Select the version and choose Photos > Remove From Album (or press Delete).

To delete a version from a version stack (a stack of versions from the same original)

- 1 Open the stack and select the version you want to delete.
- 2 Choose File > Delete Version (or press Command-Delete).

The deleted version is moved to the Aperture Trash. For more information, see [Working with the Aperture Trash](#) on page 38.

To delete an original

When a photo is represented in the Browser by a single version, you can select the version and delete it, and the corresponding original is deleted as well.

- 1 Select a version.
- 2 Choose File > Delete Version (or press Command-Delete).

The original and its version are moved to the Aperture Trash. For more information, see [Working with the Aperture Trash](#) on page 38.

To delete a version stack and its original

You can select a stack containing versions of the same image and delete all the image versions in the stack as well as the original.

- 1 Select the stack you want to delete.
- 2 Choose File > Delete Original Image and All Versions.

The original and all its versions are moved to the Aperture Trash. For more information, see [Working with the Aperture Trash](#) on page 38.

To recover a deleted photo

If you accidentally delete a photo you meant to keep, and you can't recover it by choosing Undo, you may be able to recover it from the Aperture Trash.

- 1 In the Library inspector, select Trash.

All photos currently in the Aperture Trash are displayed in the Browser.

- 2 Do one of the following:
 - Drag the photo you accidentally deleted back to its original project.
 - Control-click the accidentally deleted photo and choose Put Back from the submenu.

If you've already emptied the Aperture Trash, you may be able to recover the photo from the Finder Trash. If you've already emptied the Finder Trash, but you backed up your library before deleting the photo, you may be able to restore the project containing the deleted photo from the vault. If you updated your vault after emptying the Aperture Trash, the vault won't contain the deleted photo.

Dragging Photos into Different Projects and Albums

You can drag photos into different projects and albums. Depending on where you drag a photo, Aperture either moves or copies the photo to the new location.

As a general rule, when you drag a photo into a different *project*, Aperture moves the photo into the new project.

When you drag a photo into a different *album*, Aperture creates a duplicate version of the photo and places it in the album. A photo can be copied into any album in the same project or into albums in different projects. The destination album can be an album, book album, Light Table album, slideshow, or web journal or webpage album.

To copy a photo into a different album

- Drag the photo into another album in the Library inspector.

To move a photo into a different project

- Drag the photo into another project in the Library inspector.

To copy a photo into a different project

- Option-drag the photo into another project in the Library inspector.

You can also drag photos out of Smart Albums. If you drag a photo from a Smart Album into another album, the version is copied to the new location. If you drag a photo into a project different from the project that contains the Smart Album, Aperture moves the photo to the destination project. All links to versions in other albums are maintained. For more information, see [An Overview of Smart Albums](#) on page 255.

Renaming Original Image Files

At times, you may want to rename original image files to match the names you've assigned to the photo versions in Aperture. Although Aperture keeps track of your originals regardless of what they are named, it's often useful for your image filenames to match inside and outside of Aperture—especially when the originals are referenced images. For more information about working with referenced images, see [An Overview of Referenced Images](#) on page 99.

To rename originals

- 1 In the Browser, select a photo or group of photos.
- 2 Choose Metadata > Batch Change (or press Command-Shift-B).
- 3 In the Batch Change dialog, choose a naming convention from the Version Name Format pop-up menu to specify how you want the originals named.

For example, choose Version Name from the Version Name Format pop-up menu to have your original filenames changed to match the names of the corresponding versions in Aperture. If you choose a custom name format, enter the name you want in the Custom Name text field. For more information about naming files, see [Automatically Naming Your Imported Photos](#) on page 60.

- 4 Select the Apply to Original Files checkbox, then click OK.

The original files corresponding to the selected photos are renamed. For more information about working with the Batch Change dialog, see [Batch Changing Metadata](#) on page 194.

Working with Referenced Images

An Overview of Referenced Images

Originals for photos that you import as referenced images may reside in many different locations on your hard disk storage devices instead of in the single location of your main Aperture Library file. At times, you may need to determine which photos are referenced images in order to readily locate them in the Finder. Aperture provides many ways to identify, search for, and move referenced images.

You can copy, move, and delete referenced images in your Aperture projects using the same procedures you use for other Aperture versions and originals.

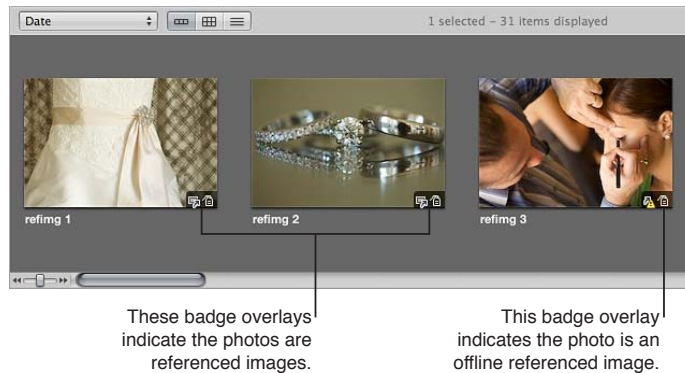
When you copy a version of a referenced image in Aperture, a new version is created and tracked in the Aperture library. No new files are recorded on the hard disk in the location of the referenced image's original.

When you move a referenced image between projects on your Aperture system, the referenced original remains in its original location on your hard disk.

When you delete a referenced original from Aperture, you can specify whether the photo's version is placed in the Aperture Trash. When you empty the Aperture Trash, the link to the original image file is deleted, and the original image file remains in its current location in the Finder.

Identifying Referenced Images

After you import referenced images, you can identify them in the Browser by turning on referenced image badge overlays. Referenced images appear with badges that show whether their originals are currently available (online) or not found (offline).



To turn on referenced image badge overlays

- 1 Choose Aperture > Preferences, or press Command-Comma (,).
- 2 In the Preferences window, click Appearance, then select the “Badge referenced items” checkbox.

You can select and work with online referenced images using the same procedures you use with photos whose originals reside in the Aperture library.

Aperture keeps track of referenced images’ originals when you move or rename the files in the Finder, keeping them on the same hard disk or volume. A referenced image appears as an offline image if the hard disk holding the referenced image’s original has been disconnected from your computer system. A referenced image is listed as “not found” when its original has been deleted, moved to the Finder Trash, or moved from its original hard disk location to another hard disk and Aperture can’t find it.

Displaying a List of Referenced Images

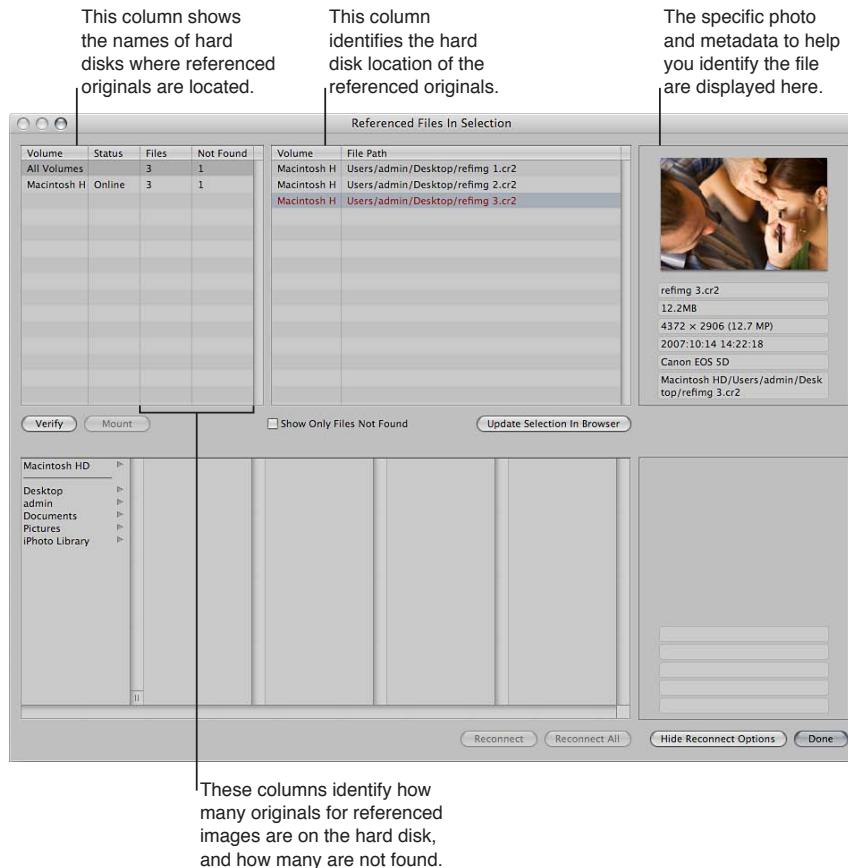
When working with numerous photos in the Browser, you may need to determine which photos have originals that reside in the Aperture library and which are referenced images whose originals are located elsewhere on your hard disks.

You can select a group of photos in the Browser and Aperture can show a list of the referenced images within the selection, including information about where the originals are located.

To see a list of referenced images in a selection

- 1 In the Browser, select a group of photos.
- 2 Choose File > Locate Referenced Files.

The Referenced Files In Selection dialog appears.



Locating a Referenced Image's Original on a Hard Disk

At times, you may need to quickly find a referenced image's original on your hard disk to copy or move it, attach it to an email, or otherwise work with it outside of Aperture. You can select a photo in the Browser and Aperture will display the location of the photo's original in the Finder.

To locate a referenced image's original in the Finder

- 1 Select a referenced image in the Browser.
- 2 Choose File > Show in Finder.

A Finder window appears, displaying the selected referenced image's original.

Note: If you open a referenced image's original from the Finder in another application, you won't see the changes or adjustments you've made to the image in Aperture. Your changes appear in versions stored in the Aperture library, and the referenced image's original is always left unchanged. To see the adjusted photo, you need to export a version of it.

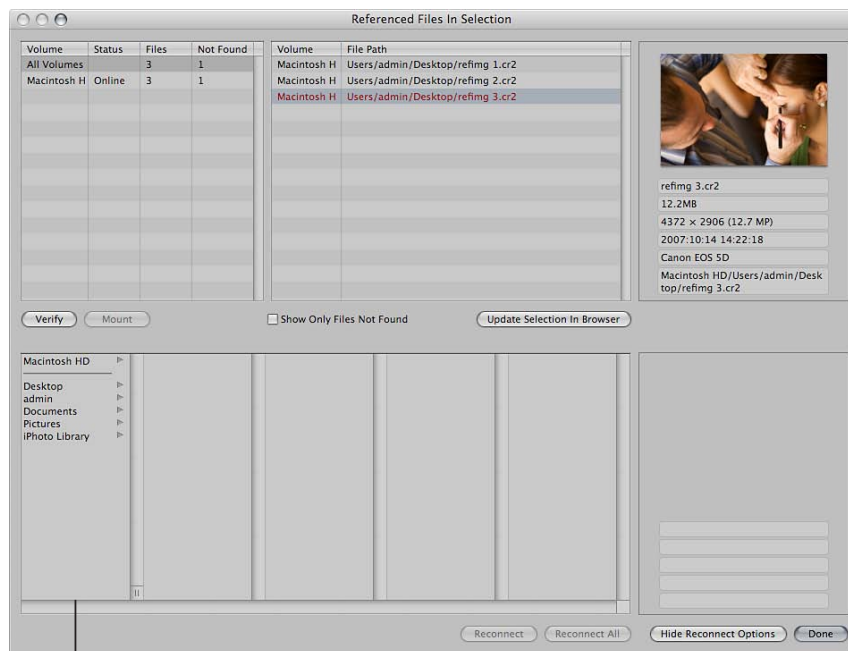
Reconnecting Missing or Offline Referenced Images

When a referenced image's original is offline, you can't make adjustments to the photo until you reconnect the original to your Aperture system. If you have disconnected a hard disk drive that holds a referenced image's original, you can reconnect the drive to your computer system and Aperture automatically locates the hard disk and reconnects the original.

If a photo is offline or modified in some way that makes it unrecognizable as the original referenced image, you can still select it and Aperture can reconnect the original for the specific photo.

To reconnect an offline referenced image

- 1 Reconnect the hard disk holding the referenced image's original, or otherwise locate or make the file available to Aperture for reconnecting.
- 2 Select the project that contains the offline photo you want to reconnect, or select the offline photo in the Browser.
- 3 Choose File > Locate Referenced Files.
- 4 If necessary, click the Show Reconnect Options button.



Select the volume you want here, and navigate to the location of the file on the hard disk.

- 5 At the top of the dialog, select the file path for the original that you want to reconnect. A thumbnail of the photo and some identifying metadata appear.
- 6 In the bottom half of the dialog, navigate to the location of the referenced image's original on the hard disk and select the original. You can follow the file path listed for a selected photo in the top of the dialog. When you select the file, a thumbnail of the photo and metadata appear, allowing you to compare them to the thumbnail and metadata in the upper part of the dialog to make sure you've selected the correct file.
- 7 Click Reconnect to reconnect a specific photo, or click Reconnect All to reconnect all selected photos.

Relocating Referenced Originals

You can easily move originals for referenced images (*referenced originals*) to new locations on the same hard disk or a different hard disk. For example, if you use several hard disks, you might want to move the originals they contain to a convenient location on a different hard disk.

To move originals for referenced images to a new location

- 1 In the Browser, select the referenced images whose originals you want to move.
- 2 Choose File > Relocate Originals.
- 3 Choose a folder location in the dialog that appears.
- 4 Choose None from the Subfolders pop-up menu to specify that the files be stored as separate, individual files in the selected folder. You can also specify that Aperture create a hierarchy of subfolders with specific folder names to store your files. For more information about creating folders to hold your imported image files, see [Importing Originals for Referenced Images into Folders](#) on page 72.
- 5 Choose a naming convention from the Name Format pop-up menu to specify how you want the originals named.

For example, choose Original File Name from the Version Name pop-up menu to have your files stored using the current original filenames from your camera or card. Choose a name format from the Version Name pop-up menu to have your originals stored using a specified name. If you choose a custom name format, enter the name you want in the Name Text field. For more information about naming files, see [Automatically Naming Your Imported Photos](#) on page 60.

- 6 Click Relocate Originals.

Moving Referenced Originals to the Aperture Library

You can move referenced images' originals (*referenced originals*) to the Aperture library. For example, if you have a variety of originals stored in different hard disk locations but it would be more convenient to work with them all stored in the Aperture library, you can select the referenced images in the Browser and Aperture can move their originals to the library. With the originals stored in the library, Aperture manages all aspects of them, keeping them always available and allowing you to back them up in your vaults.

To move referenced originals to the Aperture library

- 1 In the Browser, select the referenced images whose originals you want to move to the library.
- 2 Choose File > Consolidate Originals.
- 3 Choose whether or not you want the image files moved or copied into the Aperture library by clicking the "Move files" or "Copy files" button.
- 4 Click Continue to confirm that you want the referenced originals moved to the Aperture library.

Searching for Referenced Images Using the Filter HUD

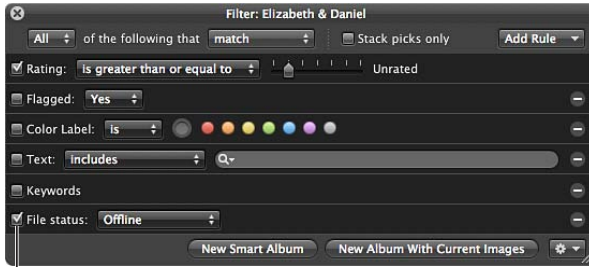
You can search for photos using their file status. For example, you can search for photos that are referenced images, managed images, and online or offline images.

To search for photos by file status, you use the File Status search options.

To search for photos by file status

- 1 In the Library inspector, select an item you want to search.
- 2 Show the Filter HUD by doing one of the following:
 - Choose Edit > Find (or press Command-F).
 - Click the Filter HUD button beside the search field in the Browser.

- In the Filter HUD, choose File Status from the Add Rule pop-up menu, and select the “File status” checkbox.
- Deselect any checkboxes that aren’t part of your query, and choose the search criteria from the “File status” pop-up menu.



Select the “File status” checkbox and choose the file status you want to search for.

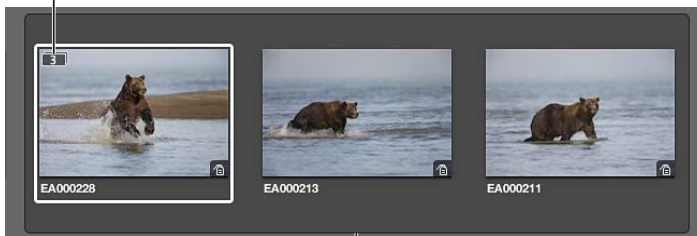
- Choose Any from the Any/All pop-up menu, if it’s not already chosen.

The photos that match the search criteria are displayed in the Browser.

Working with Stacks in the Browser

The primary place you work with stacks is in the Browser. A stack appears in the Browser as a group of photos. The photo that represents the stack, called the *pick*, is selected and displayed on the left. You can select any photo in the stack as the pick, and it moves to the leftmost position in the stack. You can rearrange the order of photos in a stack. For example, you might choose an alternate photo and position it next to the pick. A Stack button appears in the upper-left corner of the pick photo in the stack, indicating the number of photos in the stack.

The Stack button indicates the number of photos in the stack.



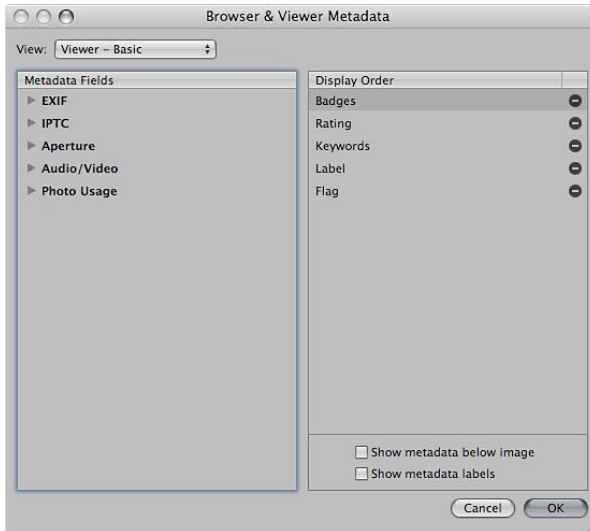
A stack with three photos is shown expanded.

For more information about working with stacks, such as keyboard commands for creating stacks, selecting a stack pick, and promoting and demoting photos, see [An Overview of Stacking Photos](#) on page 135.

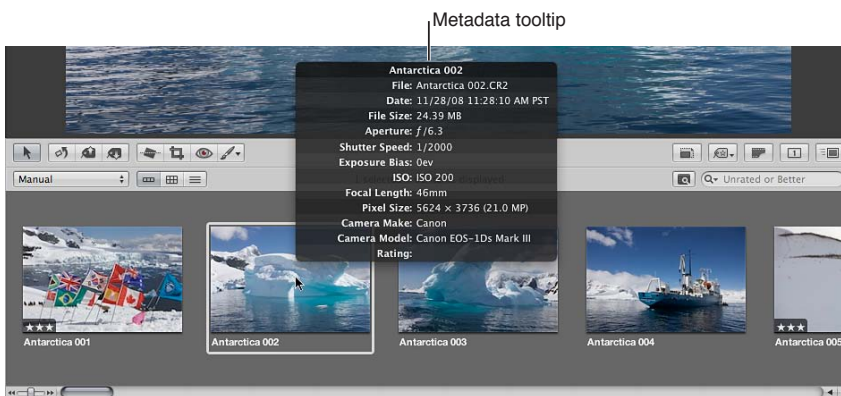
Displaying Specific Metadata with Your Photos

To help identify photos as you work, you can set Aperture to display the metadata associated with photos. You do this by specifying metadata settings in the Browser & Viewer Metadata dialog. For example, you can set Aperture to display keywords, IPTC information, or EXIF information with photos in grid view. You can also configure two views of information to be displayed with photos and quickly switch between views. For example, the first view might show ratings for use while photo editing, while another could display IPTC and EXIF information as you manage files for export. You can then switch between views to change the information that appears with your photos depending on the task at hand.

You use the Browser & Viewer Metadata dialog to customize the display of information shown with photos in the Browser.



If you prefer to display thumbnail images in the Browser without metadata overlays but would still like to quickly view a photo's metadata, you can turn on metadata tooltips. When metadata tooltips are turned on, you can move the pointer over a photo to view information about it.



For more information about changing the type of metadata that appears in overlays in the Browser, see [Specifying the Type of Metadata to Display in the Viewer and Browser](#) on page 179.

To turn the display of metadata in the Browser on or off

Do one of the following:

- Choose View > Metadata Display, then choose Show Metadata from the Browser section of the submenu (or press U).
- Choose Show Metadata from the Browser section of the Browser & Viewer Metadata Overlays pop-up menu in the tool strip.

To switch between views of metadata information in the Browser

Do one of the following:

- Choose View > Metadata Display, > then choose Switch to [*view name*] from the Browser section of the submenu (or press Shift-U).
- Choose Switch to [*view name*] from the Browser section of the Browser & Viewer Metadata Overlays pop-up menu in the tool strip.

If you prefer to display the thumbnail images in the Browser without metadata overlays but would still like a way to quickly view a photo's metadata, you can use metadata tooltips. The Metadata Tooltips HUD displays the metadata about the photo beneath the pointer. Move the pointer over another photo, and the metadata in the Metadata Tooltips HUD updates to show the information about that photo.

To turn on metadata tooltips

- Choose View > Metadata Display > Image Tooltips (or press Control-T).

Press Control-T again to turn metadata tooltips off.

For more information about displaying metadata with your photos, see [An Overview of Working with Metadata](#) on page 172.

Displaying Photos in the Viewer

5

An Overview of the Viewer

The Viewer displays a detailed view of the photo or photos selected in the Browser. You can view one photo in incredible detail or view several photos at a time.

You use the Viewer to make adjustments, closely compare similar photos, and inspect photos at full resolution. If you use a dual-display system, you can set the Viewer to show your photos on both screens to provide stunning, full-detail views. You can also use the Viewer to preview and edit audio attachments and video clips.

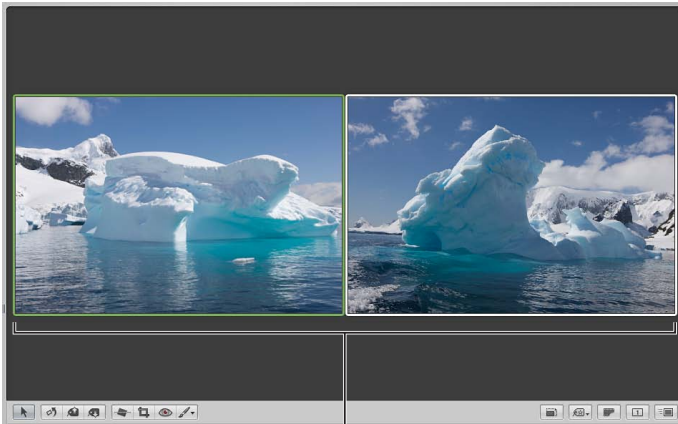
When you select photos in the Browser, the Viewer immediately displays a detailed view of your selection. You can display one photo at a time, three photos at a time, or any selection of multiple photos.



A detailed view of the selected photo appears in the Viewer.

Selected photo in the Browser

When rating or adjusting photos, you can set the Viewer to compare two photos at once. You select a photo to compare against and then display other similar or related photos next to it for inspection. You might use the Aperture comparison feature to select photos from a series or compare versions of adjusted images to see which is best.



You can use the Viewer to compare two photos.

Depending on the size of your display and Viewer, photos may be displayed at a reduced size to fit in the Viewer. Aperture can display your photos at full resolution, pixel for pixel, which can create photos larger than can fit on your display's screen. Displaying a photo at full resolution allows you to examine the photo exactly as it was recorded and see the precise effects of your adjustments and changes. In addition, you can zoom in to and out of the Viewer incrementally to check details in the photo, such as sharpness.

Full-resolution view of a photo that is larger than the Viewer's screen size



Using two displays with your Aperture system is an excellent way to view your photos. Aperture can show your photos on both displays, allowing you to dedicate one display to enlarged views. When your system uses two or more displays, Aperture provides two Viewers, called the *Main Viewer* and *Secondary Viewer*. Just as you can with a single Viewer, you can set the Secondary Viewer to show one, three, or multiple photos at a time.

You can also set metadata options that determine the amount of information that appears with each photo. For example, you can display photos in the Viewer with their keywords and other information, such as IPTC or EXIF metadata.

Customizing the Viewer Display

You can hide the Browser when necessary and work only in the Viewer. You can also quickly hide the Viewer to provide more room for the Browser, and show the Viewer again when needed.

Depending on your work preferences, you might want to lighten or darken the background that your photos appear against in the Viewer. You can darken the background from shades of gray all the way to black, or lighten it from gray to white.

You can also specify whether the Viewer displays one photo, three photos, or multiple photos at a time. If your system uses multiple displays, you can configure your main and secondary displays to show single photos, three photos, or multiple photos simultaneously. The display settings you choose also control the display of photos in Full Screen view.

To work with the Viewer only

Do one of the following:

- Choose View > Viewer.
- Click the Viewer button in the toolbar.

To hide the Viewer

Do one of the following:

- Choose View > Browser.
- Click the Browser button in the toolbar.

To switch between views

- Press V.

To change the background of the Viewer

- 1 Choose Aperture > Preferences, or press Command-Comma (,).
- 2 In the Preferences window, click Appearance, then drag the Viewer Brightness slider to lighten or darken the background.

To change the number of photos displayed in the Viewer

- *To display multiple photos:* Choose View > Main Viewer > Show Multiple (or press Option-U).

This is the default setting. When Show Multiple is chosen, the Viewer displays anywhere from one photo up to twelve at a time, depending on the number of photos selected in the Browser.

- *To display a single photo:* Choose View > Main Viewer > Show One (or press Option-R).

When the Viewer is set to Show One, the Viewer displays one photo at a time regardless of the number of photos selected in the Browser. This setting allows you to make a multiple photo selection in the Browser and then view each photo by itself within the selection.

- *To display three photos:* Choose View > Main Viewer > Three Up (or press Option-H).

When the Viewer is set to show three photos at a time, Aperture displays the selected photo in the center of the three photos that appear in the Viewer.

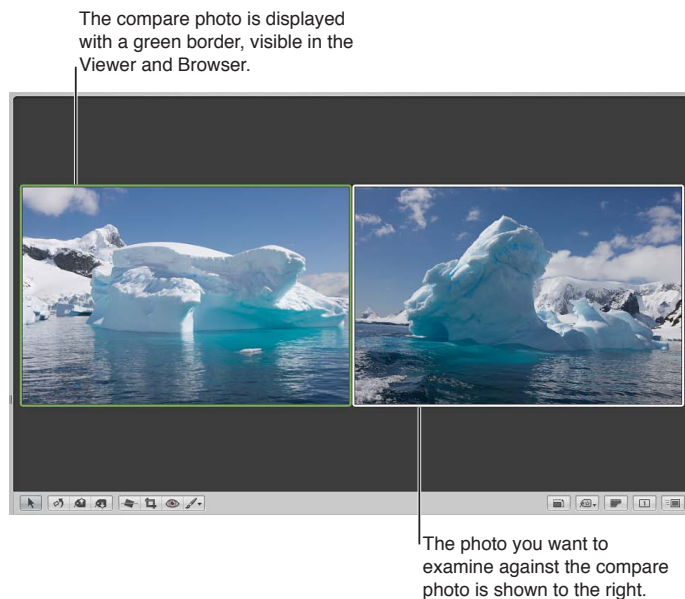
Comparing Photos

You can select a photo against which to compare other photos in your project or in the library. The selected photo remains on the screen as you select and display other photos to compare against it. The comparison feature is useful for making final selections of the best photos in a series or comparing two versions of a photo for correct exposure or highlights. When comparing photos, you can apply ratings and keywords and make adjustments to selected photos.

Comparing photos involves setting a “compare” photo and then viewing other photos against the compare photo.

To set the Viewer to compare photos

- 1 Select a photo.
- 2 Choose View > Main Viewer > Compare (or press Option-O).



To view a photo against a compare photo

Do one of the following:

- In the Browser, select another photo.
- Navigate through the photos in the Browser with the Up Arrow, Down Arrow, Left Arrow, and Right Arrow keys.

To set the alternate photo as the compare photo and navigate to the next photo

- Press Return.

To turn off the comparison feature and select the compare photo

- Choose Edit > Select Compare Item (or press Option-Return).

To turn off the comparison feature and select the photo you're viewing against the compare photo

- Choose Edit > Clear Compare Item (or press Command-Return).

You can also use these procedures to compare photos in Full Screen view. For more information about Full Screen view, see [An Overview of Full Screen View](#) on page 125.

Viewing Stacks

To work efficiently with photos in stacks, you can set the Viewer to automatically open a selected stack and set up the stacked photos for comparison. The pick of the stack is set as the compare photo. This stack-viewing feature also works in Full Screen view.

To set the Viewer to automatically open and compare the photos in stacks

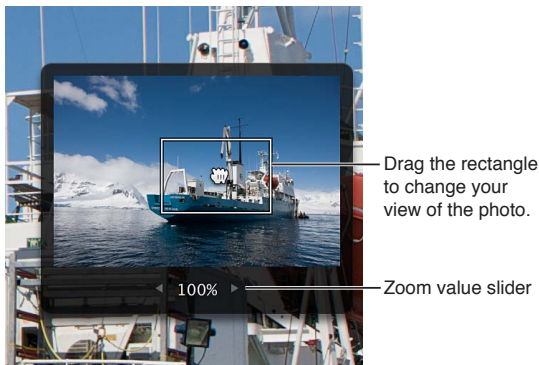
- Choose View > Main Viewer > Stack (or press Option-T).

For more information about using stacks, see [An Overview of Stacking Photos](#) on page 135.

Viewing Photos at Full Resolution

A full-resolution view of a photo shows every pixel in the photo. You can set Aperture to display a photo at full resolution even though the photo may not fit within the Viewer. Viewing photos at full resolution allows you to inspect your photo using the finest level of detail possible.

When a photo doesn't fit within the area of the Viewer, a small gray navigation box appears on the right side of the photo. This box contains a small version of the entire photo, and a white rectangle within indicates which part of the photo is currently visible in the Viewer. You can drag the white rectangle over the miniature photo to see other parts of the photo, also known as *panning*. You can also incrementally zoom in to and out of the photo at values from 25 to 1000 percent using the Zoom value slider at the bottom of the navigation box.



To display a selected photo at full resolution

Do one of the following:

- Choose View > Zoom to Actual Size (or press Z).
- Click the Zoom Viewer button in the tool strip.

Click the button again to turn off the full-resolution display.



- Use the double-tap with one finger gesture.

Double-tap with one finger again to turn off the full-resolution display.

Note: Smart zoom must be turned on in System Preferences. For more information about turning on smart zoom, see Help Center.

To pan a full-resolution photo in the Viewer

Do one of the following:

- Drag the white rectangle that appears on the photo.
- Hold down the Space bar and drag the photo.

To incrementally zoom in to and out of a photo

Do one of the following:

- Click the left and right arrows in the Zoom value slider below the white rectangle to zoom in to and out of the photo by single percentage increments.
- Drag in the Zoom value slider below the white rectangle to quickly zoom in to and out of the photo.
- Press Command–Minus Sign (–) to zoom out of the photo and Command–Plus Sign (+) to zoom in to the photo.

Viewing Original Photos

When working with adjusted images, or versions, you may at times want to check what the original photo looks like. Aperture can quickly display the original photo on which a selected version is based.

To display the original photo for a selected version

Do one of the following:

- Choose View > Show Original Image (or press M).
- Click the Show Original button in the tool strip.



Working with Audio and Video in the Viewer

If you have imported audio and video files into Aperture, you can use the Viewer to review and edit them. You can edit the length of video and audio clips using the video and audio controls in the Viewer. You can also set the poster frame for a video clip (the frame that visually represents the clip in the video's thumbnail in the Browser), as well as create a JPEG image from any frame in the video clip.

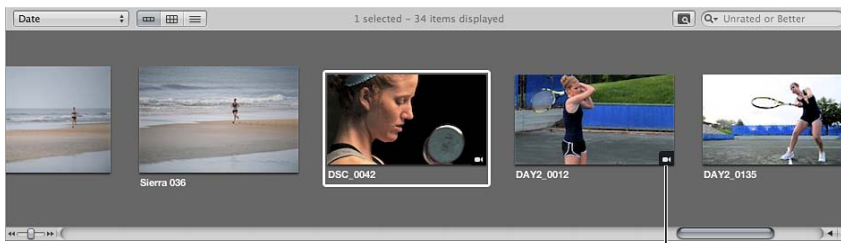
Note: If you have a camera that can record audio annotations or if you have manually attached an audio file to a photo, you use the Info inspector to listen to and edit audio attachments. For more information about listening to audio attachments, see [Viewing and Changing Metadata in the Info Inspector and Inspector HUD](#) on page 183.

To listen to audio clips or view video clips imported into Aperture

- 1 In the Library inspector, select an item that contains audio or video clips.

The audio and video clips appear in the Browser as thumbnails.

- 2 In the Browser, select either an audio or a video clip.



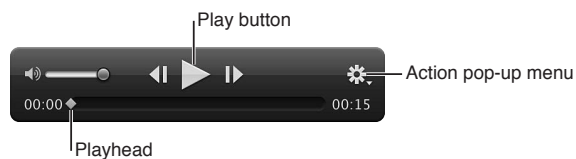
This icon indicates a video clip.

- 3 In the Viewer, do one of the following:

- *If you selected an audio clip:* Audio controls with the audio clip's filename appear in the Viewer. Click the Play button to listen to the audio clip, and use the playhead to navigate forward and backward.



- *If you selected a video clip:* The video clip appears in the Viewer. Move the pointer over the Viewer, and the video controls appear. Click the Play button to view the video clip, and use the playhead to navigate forward and backward.



To edit the length of an audio clip

You adjust the length of an audio clip by clicking the Trim button, dragging the Start and End points to the positions where you want the audio to begin and end, and then clicking the Trim button again to apply the edit.



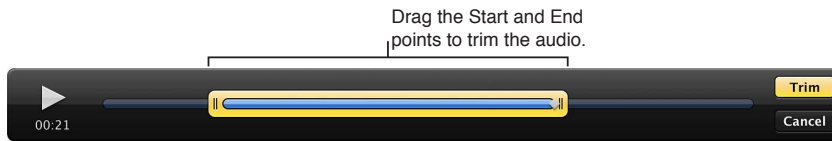
- 1 Select the audio clip in the Browser.

The audio controls appear in the Viewer with the selected audio clip's filename displayed at the top.

- 2 In the Viewer, click the Trim button.

The Trim controls appear.

- 3 Click the Play button to listen to the audio clip and determine which parts of the audio you want to keep.
- 4 Drag the Start point to the beginning of the audio you plan to use, and drag the End point to the position where you want the audio to end.



The Trim button turns yellow, indicating that the length of the audio clip has changed.

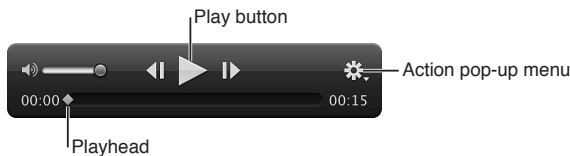
- 5 When you are satisfied with the length of the audio clip, click the Trim button.

The audio clip is trimmed.

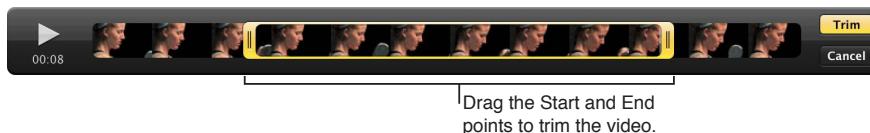
Tip: If you want to use more than one part of the audio clip, choose Photos > New Version from Original (or press Option-G) for each additional part of the clip you plan to use, and repeat the steps above.

To edit the length of a video clip

You adjust the length of a video clip by choosing Trim from the Action pop-up menu for the video controls, dragging the Start and End points to the positions where you want the video clip to begin and end, and then clicking the Trim button to apply the edit.



- 1 Select the video clip in the Browser.
The video appears in the Viewer.
- 2 Move the pointer over the lower portion of the video in the Viewer.
The video controls appear.
- 3 Choose Trim from the Action pop-up menu for the video controls.
The Trim controls appear.
- 4 Click the Play button to view the video clip and determine which parts of the video you want to keep.
Note: If you move the pointer away from the Trim controls, they disappear. Move the pointer over the lower portion of the Viewer to show them again.
- 5 Drag the Start point to the beginning of the video you plan to use, and drag the End point to the position where you want the video to end.



The Trim button turns yellow, indicating that the length of the video clip has changed.

- 6 When you are satisfied with the length of the video clip, click the Trim button.

The video clip is trimmed.

Tip: If you want to use more than one part of the video clip, choose Photos > New Version from Original (or press Option-G) for each additional part of the clip you plan to use, and repeat the steps above.

To set the poster frame for the video clip's thumbnail in the Browser

- 1 Select the video clip in the Browser.
- 2 Move the pointer over the lower portion of the video in the Viewer to show the video controls, then drag the playhead to the frame of video you want to set as the poster frame.
- 3 Choose "Set as poster frame" from the Action pop-up menu for the video controls.

The video frame at the position of the playhead is set as the video clip's poster frame, and the video clip's thumbnail image in the Browser is updated.

To create a JPEG image from a video frame

- 1 Select the video clip in the Browser.
- 2 Move the pointer over the lower portion of the video in the Viewer to show the video controls, and then drag the playhead to the video frame from which you want to create a JPEG image.
- 3 Choose "New JPEG from frame" from the Action pop-up menu for the video controls.

A JPEG image of the video frame is created, and the thumbnail image appears in a stack with the video clip in the Browser. For more information about working with stacks, see [An Overview of Stacking Photos](#) on page 135.

Displaying Metadata Associated with Photos

To help identify your photos as you work with them, you can set Aperture to display the metadata associated with photos in the Viewer. You can display keywords, ratings, EXIF information, IPTC information, and more. You can specify whether the information appears below the photos or across the bottom of the photo.

You can also specify up to two views of information to be displayed with photos in the Viewer. For example, one view might be configured to show ratings only, and another view to show all the IPTC information associated with a photo. You can then switch between views to change the information that appears with your photos.



The caption and keywords are displayed here.

For more information about working with metadata views in the Viewer, see [An Overview of Metadata Overlays](#) on page 176.

Viewing Photos on Multiple Displays

Using the additional screen space of a second display provides an excellent platform for viewing and performing image adjustments, playing slideshows, and presenting your full-color, full-size photos to clients. When your system uses two displays, Aperture provides two Viewers in which you can view multiple photos. These Viewers are called the *Main Viewer* and the *Secondary Viewer*. The Main Viewer is used for displaying the Aperture application, and the Secondary Viewer for viewing photos. The Secondary Viewer has the following settings:

- *Mirror*: Displays the same photos in the Main Viewer and the Secondary Viewer. For example, if you have the Main Viewer set to display three photos, the Secondary Viewer displays the same three photos.
- *Alternate*: Displays the currently selected photo in the Secondary Viewer. The Secondary Viewer shows only one photo, even when you have the Main Viewer set to display multiple photos.
- *Span*: Splits the display of the currently selected photos between the Main Viewer and the Secondary Viewer. For example, if you select seven photos to view, the Main Viewer shows as many as fit its screen size, and the remaining photos appear in the Secondary Viewer. Thus, one Viewer might show four photos, and the other Viewer might show the remaining three of the seven. Span is also used if you want to compare photos and show one photo per display.
- *Black*: Sets the Secondary Viewer to be a blank screen.
- *Off*: Turns off the dual-display function.

To display the same photos in both the Main Viewer and the Secondary Viewer

- Choose View > Secondary Viewer > Mirror (or press Option-M).

To display the currently selected photo in the Secondary Viewer

- Choose View > Secondary Viewer > Alternate (or press Option-A).

To display a selection of photos across both the Main Viewer and the Secondary Viewer

- Choose View > Secondary Viewer > Span (or press Option-S).

To turn off the display of photos in the Secondary Viewer, making the screen black

- Choose View > Secondary Viewer > Black (or press Option-B).

To turn off the Secondary Viewer function

- Choose View > Secondary Viewer > Off (or press Option-X).

Showing Hot and Cold Areas in Your Photos

Photos may occasionally have overly bright areas where color information is beyond the standard limits of the Aperture working color space. For example, white areas in a photo brightly lit with direct sunlight, or bright flashes off a water surface, may be so bright that their color is outside the working color space. Similarly, photos may occasionally have black areas where color information is below the standard limits of the working color space. Aperture can display these “hot” and “cold” areas of an image with tints on the photo to help you identify where they’re located. You may be able to adjust the areas identified by the hot and cold area overlays and recover highlight and shadow detail by changing the exposure, the recovery, the black point, or the gamma setting of the image.

To show the hot and cold areas in your photos

- Choose View > Highlight Hot & Cold Areas (or press Shift-Option-H).

You can also monitor color clipping per color channel when performing specific adjustments using modifier keys. For more information, see [Identifying Color Channel Clipping](#) on page 283.

To change the clipping overlays display color

You can choose to view the hot and cold overlays in color or monochrome.

- 1 Choose Aperture > Preferences, or press Command-Comma (,).
- 2 In the Preferences window, click Advanced.
- 3 Choose either Color or Monochrome from the “Clipping overlay” pop-up menu.

To adjust the hot area display threshold

You can adjust the threshold or sensitivity of the hot area overlays. By default, the threshold is set to 100%. You can set Aperture to flag pixels that are near the 100% mark by lowering the threshold in the Preferences window.

- 1 Choose Aperture > Preferences, or press Command-Comma (,).
- 2 In the Preferences window, click Advanced.
- 3 Drag the “Hot Area threshold” slider to the left to increase the sensitivity to highlight pixels, and to the right to decrease it.

To adjust the cold area display threshold

You can adjust the threshold or sensitivity of the cold area overlays. By default, the threshold is set to 0%. You can set Aperture to flag pixels that are near the 0% mark by increasing the threshold in the Preferences window.

- 1 Choose Aperture > Preferences, or press Command-Comma (,).
- 2 In the Preferences window, click Advanced.
- 3 Drag the “Cold Area threshold” slider to the right to increase the sensitivity to shadow pixels, and to the left to decrease it.

Setting Up the Viewer for Onscreen Proofing

Photos displayed on your computer screen may look different when displayed on computer screens that use different color technologies. Your photos may also reproduce differently in print depending on the type of printer, the paper used, and the color profile of the printing device.

To see what a photo will look like when you print it or view it on a different display, you can have Aperture adjust your display so that your photos resemble the final results. To adjust your computer display, you choose a proofing profile that matches, as closely as possible, the characteristics of the final output device. For example, if your photo will be printed on sheet-fed coated paper, you can choose a proofing profile for sheet-fed coated paper to see a close approximation of what the printed photo might look like. Aperture provides several dozen profiles that match the characteristics of many printers, display devices, and color spaces.

After choosing a proofing profile that matches the final output of the photo, you turn on the onscreen proofing feature, and the photo changes to show the expected results.

Onscreen proofing alters the look of photos in the Viewer and in Full Screen view.

To choose a proofing profile

- Choose View > Proofing Profile, then choose the profile you want from the submenu.

To turn onscreen proofing on or off

- Choose View > Onscreen Proofing (or press Shift-Option-P).

Working with Preview Images

An Overview of Preview Images

Aperture allows you to create and use JPEG previews of versions in the library. Preview images improve the display of photos in Aperture and allow you to easily use your photos in other applications. These preview images are used to speed up the display of photos in the Viewer, in the Browser, and in Full Screen view. Previews are JPEG images generated by Aperture that represent the original photo with any applied adjustments.

You can set Aperture to create and maintain previews automatically as you add or modify versions, or you can create previews manually whenever you need them. To maintain an efficient use of disk space and adequate display speed, you can control the size of previews, from a preview image that has the full-size dimensions of the original down to a preview image that is 1280 pixels in the longest dimension. You can also control the JPEG compression quality of the previews. If your workflows do not benefit from previews, you can configure Aperture not to create them at all.

Previews are shared with applications in iLife and iWork, and Aperture uses JPEG previews to display photos in slideshows. The result is smoother, more responsive slideshows. However, if the previews are absent or not up to date, Aperture must render the preview images before the slideshow begins.

You can control the creation and maintenance of preview images for an entire library, as well as on a project-by-project or photo-by-photo basis.

Aperture is preset to create previews for photos in the library. Previews are built as a background activity after photos are imported. If you import a large number of photos, it may take an extended time to build these previews. In that case, you may want to temporarily stop the building of previews using the Activity window and then resume building the previews later. Or, you can deselect the “Create previews for existing images” checkbox and build previews on a project-by-project basis, as described in [Sample Workflows for Using Previews Effectively](#) on page 123.

For more information about the Activity window, see [Suppressing Preview Generation](#) on page 122.

How Aperture Displays Photos in the Viewer

When a version needs to be displayed in the Viewer, Aperture does the following:

- Aperture draws the thumbnail image (a JPEG image that is 1280 pixels in the longest dimension).
- Aperture draws the JPEG preview, if present.
- Aperture decodes the original and applies any adjustments to it.

Once the last step is completed, the adjustment controls become available. Because the JPEG preview is created with all the adjustments for that version, it appears onscreen faster than the adjusted original would. The result is a sharp preview image that appears quickly in the Viewer.

Setting Preview Preferences

Aperture provides four preference settings for controlling previews. These settings apply to all libraries.

To open Aperture preferences

- Choose Aperture > Preferences, then click Previews.

The Previews pane appears.



For more information about the Previews pane, see [Previews Preferences](#) on page 595.

Controlling Previews with the Library Action Pop-Up Menu

You turn automatic preview maintenance on or off on a project-by-project basis.

To have Aperture automatically update previews in a single project only

- 1 In the Library inspector, select the projects whose photos you want to maintain previews for.
- 2 Choose Maintain Previews For Project from the Library Action pop-up menu (with a gear icon).

A checkmark appears next to the Maintain Previews For Project menu command. Aperture will now automatically update previews when photos are imported into the projects, as well as when versions are created or adjusted.

Note: Turning on automatic preview maintenance does not generate the previews. It only tells Aperture what to do the next time a photo is imported or a version is created or adjusted. To generate previews, you can use the shortcut menus described in [Controlling Previews with Shortcut Menus](#) on page 119.

Controlling Previews with Shortcut Menus

You can control previews in projects by Control-clicking a project in the Library inspector and choosing an item from the shortcut menu that appears. In addition, you can control previews for single photos or for a selection of photos by Control-clicking photos in the Browser.

In the Library inspector, you can delete all the previews for a project or update all the previews for a project.

To delete all the JPEG previews for a project

- In the Library inspector, select the project whose JPEG previews you want to delete, then choose Photos > Delete Previews for Project.

To update all the JPEG previews in a project

- In the Library inspector, select the project whose JPEG previews you want to update, then choose Photos > Update Previews for Project.

If previews are already up to date and you choose Update Previews, Aperture alerts you that no work is required. However, you can force the rebuilding of previews (see the following steps).

To force the rebuilding of JPEG previews in a project

- In the Library inspector, select the project whose JPEG previews you want to force Aperture to update, hold down the Option key, then choose Photos > Generate Previews for Project.

To delete JPEG previews for a photo selection

In the Browser, you can select one or more photos and either delete or update the JPEG previews.

- 1 In the Browser, select a photo or group of photos whose JPEG previews you want to delete.
- 2 Choose Photos > Delete Previews.

To update JPEG previews for a photo selection

- 1 In the Browser, select a photo or group of photos whose JPEG previews you want to update.
- 2 Choose Photos > Update Previews from the shortcut menu.

To force the rebuilding of JPEG previews for a photo selection

- 1 In the Browser, select a photo or group of photos whose JPEG previews you want to force Aperture to update.
- 2 Hold down the Option key, then choose Photos > Generate Previews from the shortcut menu.

Rescheduling JPEG Preview Maintenance

Preview maintenance can be rescheduled for projects in which automatic preview maintenance is turned off.

To reschedule JPEG preview maintenance

- In the Library inspector, select the project whose JPEG previews you want to start updating again, then choose Photos > Update Previews.

Note: Each time you open Aperture, it checks for out-of-date previews in those projects whose automatic preview maintenance option is turned on and then schedules the previews for regeneration. If you don't want previews updated automatically, turn off automatic preview maintenance for your projects. For more information, see [Controlling Previews with the Library Action Pop-Up Menu](#) on page 119.

Rendering Preview Images

Aperture renders preview images in four situations:

- When a library is upgraded—provided that the “Create previews for existing images” checkbox is selected in the Welcome to Aperture dialog
- When a photo is imported, or a version is created, rotated, or adjusted—provided that the Maintain Previews item is selected in the Library Action pop-up menu (with a gear icon)
- When you select the library, a project, or a photo selection and choose Photos > Update Previews
- Immediately before a slideshow, if the previews are not up to date, and the slideshow preset uses the Best quality setting

When rendering a group of preview images, Aperture uses the current application preference settings for compression quality and picture size, not the settings that were specified when preview rendering began. For example, if you have the quality set to 6, and then halfway through rendering you change the setting to 8, the previews that have not yet been rendered will be compressed at setting 8. Previously rendered previews are unaffected.

To update previews to use new size and compression settings

- 1 In the Browser, select the photos you want to update.
- 2 Hold down the Option key, then choose Photos > Generate Previews from the shortcut menu.

If you encounter performance issues, you can check the Activity window to see if Aperture is doing work in the background (choose Window > Show Activity). If you think that preview processing may be degrading performance, you can turn off automatic preview maintenance for that project and cancel the preview processing task underway. You can then generate the previews at a more convenient time.

Determining Which Versions Have Previews

There isn't a badge indicating if a version has a preview. You can choose Photos > Update Preview from the shortcut menu to learn if a version's preview is up to date. (If the version's preview is not present or needs updating, Aperture will build it or update it.) You can also drag a single version out of the Aperture Browser and a plus sign (+) appears over the pointer, indicating that there is a preview to drag out. If a plus sign does not appear, no preview exists for the selected version.

When a version has a preview built for it, you can drag the photos directly from the Browser to any application that accepts JPEG files, including the Finder, Mail, and most other applications. If the version doesn't have a preview, dragging and dropping is disabled for that version (except within Aperture). If you are dragging multiple photos, but only some of them have previews, only the versions with previews are dragged out.

Integration with iLife and iWork

You can use previews to distribute your Aperture photos in movies, on the web, on DVDs, in slideshows, and in podcasts. You can also download your Aperture photos to devices such as iPod, import your Aperture photos into iPhoto, or use them to create Pages documents. The Media Browsers in the iLife and iWork applications support browsing Aperture libraries. For each version in the library, Aperture provides two JPEG files to iLife and iWork: a 240-pixel (longest dimension) JPEG thumbnail that is shown in the Media Browser, and the JPEG preview image (at whatever size you specified for it). If a version has no preview, the photo is not made available to the Media Browser.

Note: When photos are within stacks, only stack picks and album picks are shared. If you want iLife to have access to a photo in a stack and it's not the pick, you need to extract it from the stack or make it the pick.

Like photos in iPhoto libraries, photos in Aperture libraries can be used for your screen saver, desktop picture, and Mail, through the same mechanism the Media Browser uses.

Displaying Offline Referenced Images

When an original is offline or cannot be found, Aperture draws the thumbnail image first, and then the preview if it is present. Because the preview is high quality, you can zoom and even use the Loupe.

Suppressing Preview Generation

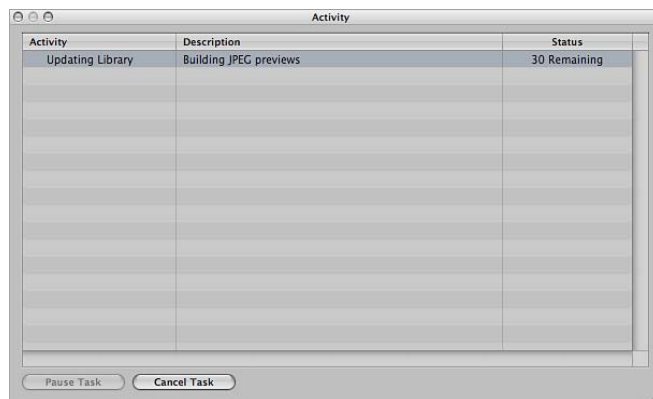
When Aperture opens, it begins updating previews for those projects whose Maintain Previews For Project setting is turned on. (For more information about maintaining previews, see [Controlling Previews with the Library Action Pop-Up Menu](#) on page 119.) This can cause problems if a project contains damaged files or images in unsupported file formats. You can suppress preview generation when opening Aperture, allowing you to more easily identify the damaged image files. To do this, press the Shift key while opening Aperture. You can also cancel the current preview maintenance operation using the Activity window.

Note: If you have canceled a preview maintenance operation, the previews are not updated until another change is made to the photo. To force Aperture to update the preview for a photo, see [Controlling Previews with Shortcut Menus](#) on page 119. The next time you open Aperture, automatic preview maintenance resumes.

While Aperture is open it renders preview images in the background; however, there may be times when you want to stop this operation. You can view the progress of the preview render operation, as well as cancel the operation, in the Activity window.

To stop the building of previews

- 1 Choose Window > Show Activity.



- 2 In the Activity window, select the “Building JPEG previews” task, then click the Cancel Task button.
- 3 Close the Activity window.

Note: Because slideshows that use the Best quality setting cannot begin until all preview images are up to date, preview generation is done in the foreground with a Cancel button to stop the operation. In all other cases, previews are created in the background.

To turn off previews

If your workflow does not benefit from previews, you can turn them off completely.

- 1 Choose Aperture > Preferences, then click Previews.
- 2 Deselect the “New projects automatically generate previews” checkbox.

This turns off automatic preview maintenance for any new projects that you create.

- 3 In the Library inspector, select all the projects, then choose Maintain Previews For Projects from the Library Action pop-up menu (with a gear icon), so there is no checkmark next to it.

This turns off automatic preview maintenance for your existing projects.

Note: You need to perform steps 1 through 3 for each of your libraries.

- 4 If you have already generated previews for some projects and do not want them, select all the projects in the Library inspector, then choose Photos > Delete Previews for Items.

This deletes all previews that have been generated previously. You need to do this for each library in which you have already generated previews.

Sample Workflows for Using Previews Effectively

There are several methods for using preview images efficiently and effectively:

- *Generate previews for projects you intend to keep offline:* A JPEG preview is displayed when a referenced image's original is offline or cannot be found. This makes previews a great way of maintaining high picture quality while conserving the disk space that originals (especially RAW files) require.
- *Generate previews for photos based on rating:* Another way to use previews is to create a search that displays only low-rated photos. You can then build previews just for those photos and take their originals offline (for example, burn them to a DVD). That way you still have good-quality images for all of your photos, without using a lot of disk space.

You can also create a search that displays only highly rated photos and then build previews for those photos only. This is a useful alternative for workflows in which the default thumbnail resolution is sufficient for low-rated photos. For more information about searching for photos, see [An Overview of Searching](#) on page 229.

- *Generate previews for new or active projects:* Because previews are used by the iLife and iWork Media Browsers as well as by the OS X screen saver, you can use previews as a way to distribute your Aperture photos in movies, on the web, on DVDs, in slideshows, and in podcasts using the applications in iLife. You can also download your Aperture photos to devices such as iPad, iPhone, and iPod touch; import your Aperture photos into iPhoto; or use them to create Pages documents.
- *Generate previews for Smart Albums:* You can create previews for photos collected in Smart Albums. For example, you can create previews for highly rated photos only. For more information about working with Smart Albums, see [An Overview of Smart Albums](#) on page 255.

To use previews for offline referenced images

- 1 Make sure the external hard disk containing the referenced originals you want to keep offline is connected to your computer.

If the originals you want to keep offline are currently stored on your computer, you must convert the images to referenced images and move the originals to an external hard disk. You can do this by selecting the project containing the photos whose originals you want to keep offline, choosing File > Relocate Originals, selecting an external hard disk location for the originals, and then clicking Relocate Originals.

- 2 Select the project containing the photos whose originals you want to keep offline, then choose Photos > Update Previews.
- 3 When the previews are built (you can check the status by choosing Window > Show Activity), you can disconnect the hard disk containing the originals.

Even though the originals are offline, you can browse, search, and assign metadata to preview images. You can even use the Loupe to zoom in on preview images, because they are high-quality JPEG files.

To share previews with other applications

- 1 Select the project whose photos you want to share with other applications, then choose Maintain Previews For Project from the Library Action pop-up menu (with a gear icon).
- 2 Make sure that Always is chosen in the “Share previews with iLife and iWork” pop-up menu in Aperture preferences (choose Aperture > Preferences, then click Previews).
- 3 In the Library inspector, select the project and choose Photos > Update Previews for Project.

When the previews are built, you can open any of the iLife and iWork applications and use your Aperture photos.

To generate previews for Smart Albums

- 1 Create a Smart Album and specify criteria for it using the Smart Album’s Smart Settings HUD.
- 2 Click in the Browser, then press Command-A to select all the photos.
- 3 Choose Photos > Update Previews.

Note: Previews for Smart Albums are not automatically maintained—automatic preview maintenance is a project-level setting only. In this workflow, you need to update the previews yourself periodically, by following the steps in [Controlling Previews with Shortcut Menus](#) on page 119. Aperture builds previews only for the versions that have changed, so you don’t need to determine which ones to update.

Viewing Photos in Full Screen View

6

An Overview of Full Screen View

Full Screen view shows your photos against a black background for detailed viewing using every inch of the display. Using a dual-display system in Full Screen view gives you an enlarged space in which to compare and adjust images.

You can view, compare, and stack your photos in Full Screen view. You can also apply adjustments and keywords. When you've finished working with your photos, you can use this view to preview and proof your photos.

You can use any of the Aperture HUDs in Full Screen view. You can open the Inspector HUD or Keywords HUD by pressing its keyboard shortcut. In fact, you'll find it convenient to use keyboard shortcuts for most features you use in Full Screen view. For more information about keyboard shortcuts you can use, see the *Aperture 3 Keyboard Shortcuts* PDF available in the Help menu.

Full Screen view has three modes that you can access by pressing the V key:

- *Viewer mode* is similar to the Split View layout in the Aperture main window. Use the filmstrip to navigate through, organize, and rate your photos. Photos selected in the filmstrip appear above the filmstrip in high resolution, filling the screen.

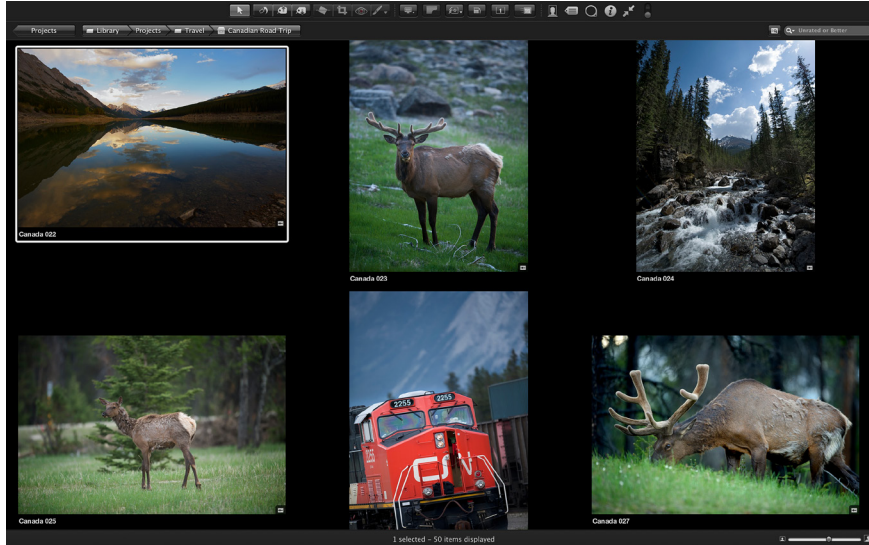


You can dock the filmstrip on the left, right, or bottom of the screen—wherever it best suits your work habits. You can also hide or show the filmstrip whenever you like.

Use the toolbar buttons and tools to modify your photos. The toolbar includes buttons for creating versions and working with stacks, as well as a full set of image adjustment tools.

For more information about Viewer mode, see [Working in Viewer Mode in Full Screen View](#) on page 127.

- *Browser mode* is similar to the working layout you see when the Browser is set to grid view in the Aperture main window. The search field and Filter HUD are accessible for filtering photos, and the Library Path Navigator pop-up menus provide access to all the items in the Library inspector.



For more information about Browser mode, see [Working in Browser Mode in Full Screen View](#) on page 130.

- *Projects mode* is similar to the Projects view in the Aperture main window. Each project is displayed as a thumbnail image. You can group projects by the year the photos were created or by the folders in which they reside in the Library inspector.



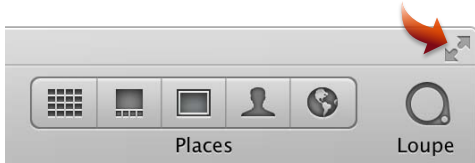
For more information about Projects mode, see [Working in Projects Mode in Full Screen View](#) on page 131.

Entering and Exiting Full Screen View

You can quickly switch between Full Screen view and your workspace layout in the Aperture main window.

To enter Full Screen view

- Click the Full Screen button at the top-right corner of the Aperture main window (or press F).



The Aperture main window disappears, and your photos appear in Full Screen view.

To exit Full Screen view

Do one of the following:

- Click the Exit Full Screen button in the Full Screen view toolbar (or press F).



- Press Esc (Escape).

The workspace view you were working in before entering Full Screen view reappears.

Note: When you quit Aperture while working in Full Screen view, Aperture returns to Full Screen view the next time you open the application. You can bypass Full Screen view and return to the main Aperture workspace by pressing Shift-Option while opening Aperture.

Working in Viewer Mode in Full Screen View

When you first enter Full Screen view, Viewer mode is shown. Viewer mode is similar to the Split View layout in the Aperture main window; however, the photos are displayed in high resolution against a solid background. You navigate through your photos using the filmstrip.

To view a photo in the filmstrip

- Select a photo displayed in the filmstrip by pressing the arrow keys or clicking the photo you want to see.

To view more than one photo at the same time

- 1 Choose Show Multiple from the Viewer Mode pop-up menu in the toolbar.



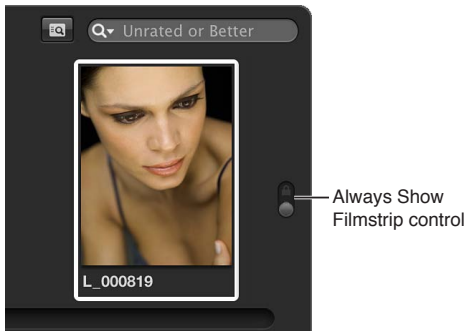
- 2 In the filmstrip, do one of the following:
 - Command-click nonadjacent photos to select them.
 - Shift-click images to select a range of photos.

To show and move the filmstrip

The filmstrip includes a control that lets you define when the filmstrip appears. You can choose to always show the filmstrip, so that Aperture automatically fits the photos and filmstrip on your screen without overlapping, or you can hide it, so that it appears only when you place the pointer over the area where it is docked.

You can also move the filmstrip to the left, bottom, or right side of your main display.

- *To always show the filmstrip:* Move the Always Show Filmstrip control to the locked position.



The filmstrip is set to always appear, and Aperture automatically fits the photo and the filmstrip on the screen, without overlapping.

- *To show the filmstrip only when you move the pointer over its docked position:* Move the Always Show Filmstrip control to the unlocked position.

The photo fills the screen, and the filmstrip appears over the photo when you move the pointer over the area where the filmstrip is docked.

- *To move the filmstrip to a different location:* Drag the filmstrip to the left, right, or bottom of the Aperture window.

To search for a photo in the filmstrip

When you have more photos than the filmstrip can display at once, you can use the search field in the filmstrip to quickly locate photos. The search is confined to the selection in the Library pane of the Inspector HUD.

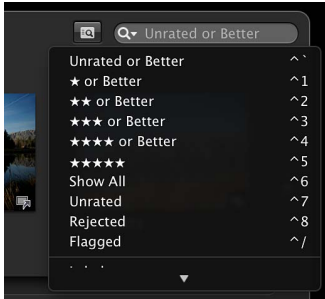
- Enter text associated with that photo in the filmstrip's search field.

Aperture finds the relevant photo or photos for you, removing others from view. To see all your photos again, click the search field's Reset button (with an X) or delete the text in the search field.

Important: You can use keyboard shortcuts to quickly implement a search that displays photos with specific ratings or photos that have a specific keyword. It's possible, while working with photos, to accidentally press such a keyboard shortcut and see photos on your screen unexpectedly change or even disappear. If this happens, you can display your photos by clicking the Reset button in the search field to reset the search criteria in the Filter HUD.

To set the filmstrip to filter photos

By default, the filmstrip is set to show photos that are unrated or better. Any photos that have been assigned the Reject rating are automatically removed from view. To view rejected photos, you must set the filmstrip to show all photos.



You can also filter the photos shown in the filmstrip by criteria other than ratings. For example, you can filter photos by whether they've been flagged or assigned a color label.

- *To set the filmstrip to show all photos:* In the filmstrip, choose Show All from the search field pop-up menu.

All photos, including rejects, appear in the filmstrip, and Showing All appears in the filmstrip's search field.

- *To set the filmstrip to show only rejected photos:* In the filmstrip, choose Rejected from the search field pop-up menu.

Only photos with the Reject rating appear in the filmstrip, and X appears in the filmstrip's search field.

- *To set the filmstrip to show only flagged photos:* In the filmstrip, choose Flagged from the search field pop-up menu.

- *To set the filmstrip to show only photos assigned a specific color label:* In the filmstrip, choose a color label from the search field pop-up menu.

To view the Full Screen view toolbar

The toolbar displayed in Full Screen view is similar to the toolbar in the Aperture main window. You use the toolbar's buttons and tools to make image adjustments and to control your displays.

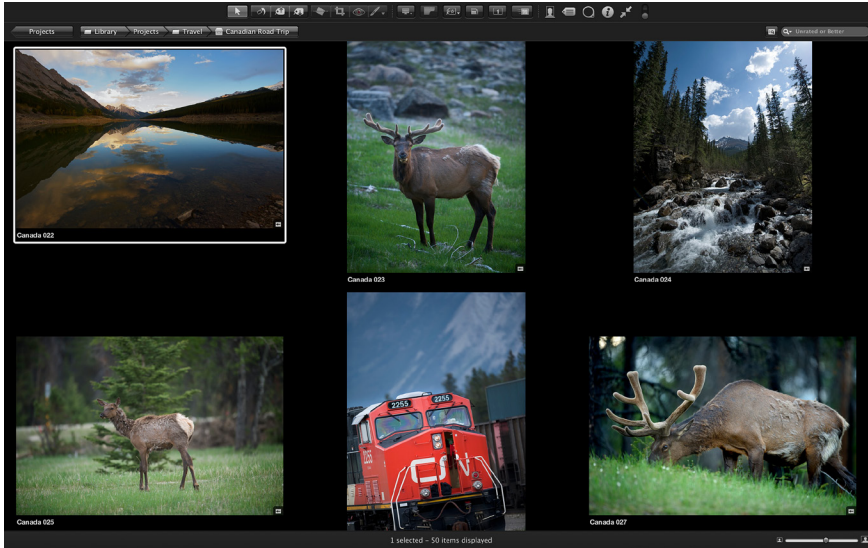


- In Full Screen view, move the pointer to the top of the screen on the main display.

You can have the toolbar always appear on the screen by clicking the Always Show Toolbar control in the toolbar.

Working in Browser Mode in Full Screen View

You can set Full Screen view to switch between Viewer mode and Browser mode. Browser mode displays thumbnail images in a grid over a black background with minimal color interference. As in the Browser in the main Aperture workspace, the search field and Filter HUD are accessible for filtering photos. When Full Screen view is set to Browser mode, the toolbar remains accessible at the top of the screen but the filmstrip disappears.



To set Full Screen view to Browser mode

- 1 If Aperture is not already in Full Screen view, enter it by pressing F.
- 2 Press V to switch from Viewer mode to Browser mode.

Full Screen view switches from Viewer mode to Browser mode.

To set Full Screen view back to Viewer mode

Do one of the following:

- Press V again.
- Double-click a thumbnail image.

Full Screen view switches back to Viewer mode.

To navigate through photos

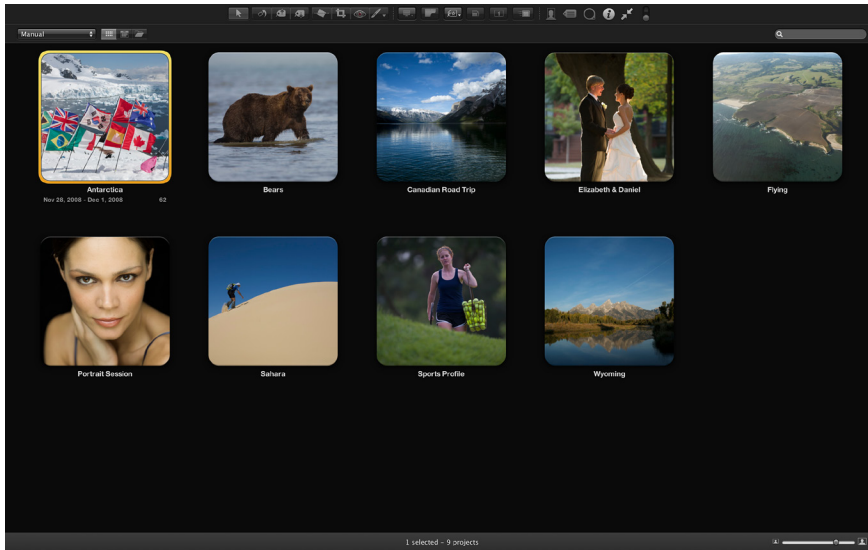
Do one of the following:

- Press an arrow key to move left, right, up, or down.
- Use the scroll swipe gesture to scroll through the photos, then click the photo you want to work with.

You select and search for photos in Browser mode in the same way you select and search for them when the Browser is set to grid view in the main Aperture window. For more information, see [Selecting Photos](#) on page 82 and [Searching for Photos in the Browser](#) on page 94.

Working in Projects Mode in Full Screen View

When you want to view your projects using as much screen space as possible and with a minimum of color interference, you can set Full Screen view to Projects mode.



To set Full Screen view to Projects mode

- 1 If Aperture is not already in Full Screen view, enter it by pressing F.
- 2 Press V to set Full Screen view to Browser mode.
- 3 Click the Projects button in the top-left corner of the screen.

Full Screen view switches from Browser mode to Projects mode. The controls in Projects mode are the same as the controls in the Projects view in the Aperture main window. For more information about Projects view, see [Switching to Projects View](#) on page 43.

To switch Full Screen view from Projects mode to Browser mode

- Double-click a project's thumbnail.

Full Screen view switches to Browser mode.

Using HUDs in Full Screen View

You can use these HUDs to work with your photos in Full Screen view:

- *Keywords HUD*: Use the Keywords HUD to create and organize keywords and to add keywords to your photos.
- *Inspector HUD*: Use the Inspector HUD to navigate through the library, modify metadata in your photos, and perform adjustments.
- *Tool HUDs*: Use any of the adjustment tools that work in conjunction with HUDs.

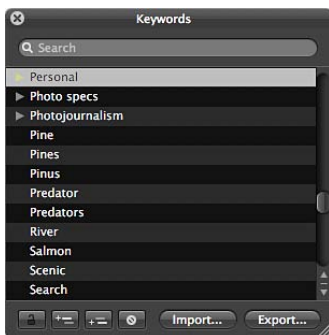
HUDs are available for use in Full Screen view and can make adjusting photos easier.



To show or hide the Keywords HUD

Do one of the following:

- Click the Keywords HUD button in the toolbar.



Use the Keywords HUD in Full Screen view to quickly add keywords to your photos.

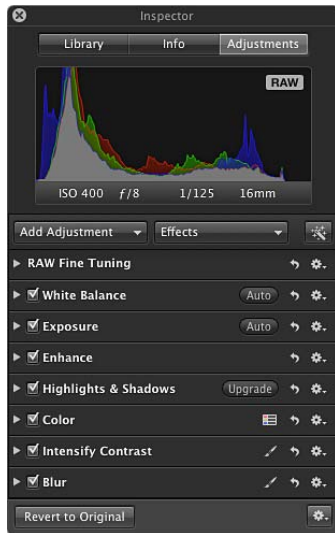
- Press Shift-H.

For more information about using the Keywords HUD, see [An Overview of Keywords](#) on page 152.

To show or hide the Inspector HUD

Do one of the following:

- Click the Inspector HUD button in the toolbar.



Use the Inspector HUD in Full Screen view to open the Library pane, Info pane, or Adjustments pane when working with photos.

- Press H.

To temporarily hide the Inspector HUD while making an adjustment

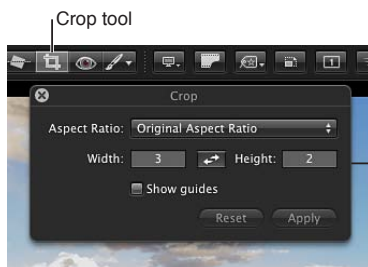
You can temporarily hide the Inspector HUD while performing an image adjustment, so that you have an unobstructed view of your photo.

- Hold down the Shift key while dragging a slider in the Adjustments pane of the Inspector HUD. When you release the Shift key, the Inspector HUD reappears.

To open any of the adjustment tool HUDs

- Show the Full Screen view toolbar by moving your pointer to the top of the screen on your main display.
- Select an adjustment tool in the toolbar, or choose a Quick Brush adjustment from the Quick Brush pop-up menu.

If the tool you selected has a HUD, that HUD appears.



The Crop HUD appears when you select the Crop tool in the toolbar.

To hide the adjustment tool HUDs

- Select the Selection tool in the toolbar.

Changing the Display of Metadata in Full Screen View

The metadata display settings you choose for the Viewer and Browser also apply to photos displayed in Full Screen view and in its filmstrip. The settings for the Viewer control the display of metadata for full-screen photos, and the settings for the Browser control the display of metadata for thumbnails in the filmstrip. For more information about setting the display of metadata, see [An Overview of Working with Metadata](#) on page 172.

Although the menus are not available in Full Screen view, you can change the display of metadata using the same keyboard shortcuts used to change the display of metadata in the Browser and Viewer.

To turn the display of metadata in Full Screen view on or off

- Press Y.

To switch between metadata views for photos in Full Screen view

- Press Shift-Y.

To hide or show metadata in the filmstrip and the Full Screen view Browser mode

- Press U.

Stacking Photos and Making Picks

7

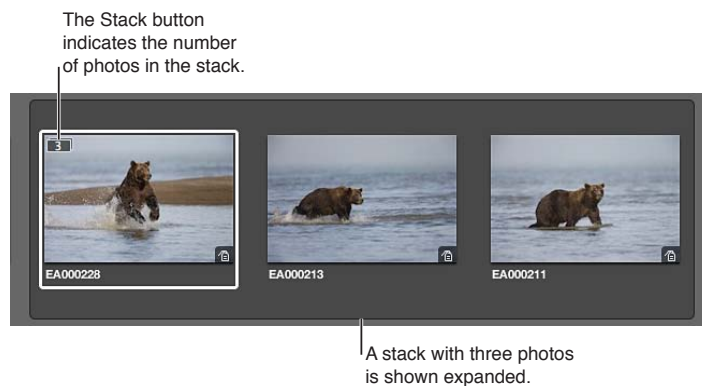
An Overview of Stacking Photos

To capture a specific moment in time, such as a bride and groom kissing or a student soccer player kicking the winning goal, a photographer may shoot multiple photos, using both bracketing and continuous shooting, to increase the odds of capturing a usable photo. After shooting the series, the photographer reviews the images and picks the best photo of the group.

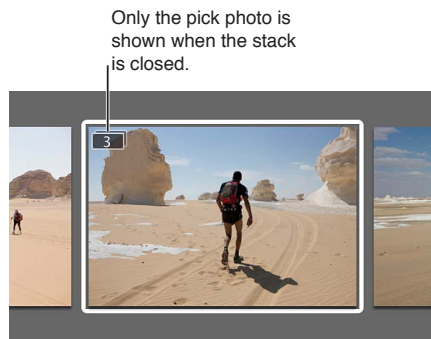
Reviewing and making picks from many related photos can be time-consuming and difficult. Aperture makes it simple to choose the best photo out of a series by allowing you to group related photos into sets, called *stacks*, that are easy to review, work with, and select final picks from.

Aperture can automatically create stacks by grouping photos that were shot in quick succession, or by grouping multiple versions of the same photo. You can also select photos and create stacks manually.

A stack appears in the Browser as a group of thumbnail images. The photo that represents the stack, called the *pick*, is selected and displayed on the left. You can select any photo in the stack as the pick, and it moves to the leftmost position in the stack. You can rearrange the order of photos in a stack. For example, you might choose an alternate photo and position it next to the pick. A Stack button appears in the upper-left corner of the pick photo in the stack, indicating the number of photos in the stack.



After creating a stack and selecting the pick, you can close the stack by clicking the Stack button on the pick photo. When a stack is closed, only the stack's pick photo appears in the Browser. Clicking the Stack button again expands the stack.



By closing stacks, you quickly reduce the number of photos you have to visually sort through when selecting photos in the final photo edit.

After creating stacks, you can organize and change them as needed. You can add photos to a stack and remove those that don't belong. You can also split a stack into multiple stacks if necessary.

Important: When you open an Aperture library in iPhoto, only stack picks are shown. The photos within stacks are not shown or accessible, but they are not discarded. To work with your photos within stacks, open the Aperture library in Aperture.

Creating Stacks

You can create stacks in two ways: specify that Aperture create stacks automatically, or you can create stacks manually. For example, if you shoot a series of photos in quick succession (such as at a sports event) or if you bracket photos to allow for differences in lighting or exposure, you most likely will want to view those photos together. Aperture can stack those photos based on metadata recorded by the camera as the series of pictures is taken.

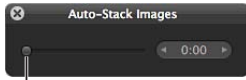


A series of photos taken in quick succession.

- **Photo series:** With a series of photos shot in quick succession, Aperture can determine the photos in a sequence and group them in a single stack. For example, sports photographers shoot rapid bursts of photos to capture action. Based on timeline metadata—when a series of shots was taken and the interval between shots—Aperture can determine which photos fall into a sequence and group them in stacks.
- **Bracketed shots:** These typically represent a series of three pictures with slightly different exposure settings. Advanced digital cameras often have options for shooting bracketed shots automatically. When Aperture detects a series of bracketed photos, it includes the neutral photo and the over- and underexposed photos in the stack.
- **Version stacks:** You can also have Aperture automatically group new versions of the same photo as you create them.

To automatically stack photos

- 1 In the Library inspector, select a project or an album that contains the photos you want to stack.
- 2 Choose Stacks > Auto-Stack (or press Command-Option-A).
- 3 In the Auto-Stack Images HUD, drag the slider to specify the maximum interval for successive shots in a stack.



Move the slider to indicate the maximum interval for successive shots.

As you drag the slider, the photos in the Browser are stacked according to the interval of time specified. For example, if you typically shoot a series of related photos in 15-second intervals, set the slider to 15 seconds.

- 4 Inspect the stacks to determine if the time interval should be shortened or lengthened.

Note: You can also manually select photos in the Import browser and stack and unstack them using the same commands and procedures you use to stack photos in the Browser.

To automatically create new version stacks

- 1 Choose Aperture > Preferences, or press Command-Comma (,).

The Aperture Preferences window appears.

- 2 Click the General button, then select the “Automatically stack new versions” checkbox.

To create a stack manually

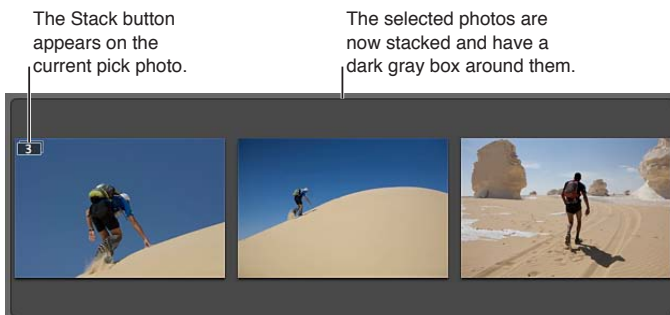
After importing photos, you may want to quickly review them and delete those that you immediately see have technical or content flaws. You may then want to group the remaining photos into stacks before rating them. Stacking photos manually can help provide an initial organization and an overview of your shots, which you can then put through a more refined or discriminating rating pass later.

- 1 In the Browser, select the photos you want to stack.

You can Shift-click adjacent photos and Command-click nonadjacent photos to select them.

Tip: To quickly select a series of photos, select a photo at one end of the series, hold down the Shift key and press the Right Arrow or Left Arrow key to select additional photos.

- 2 Choose Stacks > Stack (or press Command-K).



The Stack button appears on the current pick photo.

The selected photos are now stacked and have a dark gray box around them.

The selected photos are now stacked and appear linked in gray. The Stack button appears as an overlay on the top-left portion of the current pick photo in the Browser. You can change the pick photo and rearrange the order of the photos in the stack as you wish.

To unstack a selection of photos

- After creating a stack, choose Edit > Undo, or select a photo in the stack and choose Stacks > Unstack (or press Command-Shift-K).

Working with Stacks

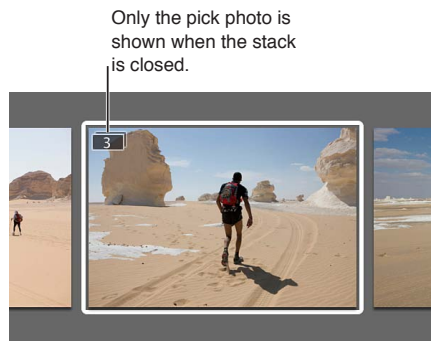
Opening and Closing Stacks

You can close a stack and open it again whenever you wish. You may want to do this to free up space in the Browser. You can also close stacks to quickly reduce the number of photos you must sort through visually when selecting photos for a final photo edit. When a stack is closed, only the stack's pick photo appears in the Browser.

To close a stack

Do one of the following:

- Select an open stack, then choose Stacks > Close Stack (or press Shift-K).
- Click the Stack button on the pick photo.



To close all stacks

- Choose Stacks > Close All Stacks, or press Option-Semicolon (;).

To open a stack

Do one of the following:

- Select a closed stack, then choose Stacks > Open Stack (or press Shift-K).
- Click the Stack button on the pick photo.

To open all stacks

- Choose Stacks > Open All Stacks, or press Option-Apostrophe (').

Designating a Pick Photo for a Stack

The pick photo represents the stack. You can set the photo you like best as the pick, or Aperture can set the pick automatically. When you select and stack photos manually in the Browser, the leftmost photo becomes the pick. You can change the pick whenever you wish.

To set a photo as the pick

Do one of the following:

- Select a photo in the stack, then choose Stacks > Pick, or press Command-Backslash (\).
- Drag the photo you want into the pick (or leftmost) position in the stack. When you see a green bar appear, release the mouse button.

Designating an Album Pick for a Stack

The same stack may appear in several albums. Depending on the purpose of the album, you may want a different pick photo for each album. For example, a stack in a webpage album may have one pick photo, and the same stack in a book album may have a different pick photo adjusted for printing. You can designate a specific photo in a stack to be an “album pick”—the pick for the stack within a specific album. Each album can have a different album pick for the stack.

An album pick appears with the Album Pick badge at the top of the image’s thumbnail in the Browser.



To select an album pick for a stack that appears in multiple albums

- Select a photo in the stack, then choose Stacks > Set Album Pick, or press Command-Shift-Backslash (\).

To clear an album pick for a stack

- Choose Stacks > Clear Album Pick, or press Command-Shift-Backslash (\) again.

Arranging Photos in a Stack

It can sometimes be difficult to decide which photo in the stack should be the pick. In many cases, photos are so similar that more than one merits the pick position. For this reason, you may want to have alternate photos available when presenting photos to clients.

You can change the order of photos within a stack to help you choose the pick and alternates. Moving a photo to the left promotes it; moving it to the right demotes it.

To promote a photo in a stack

Do one of the following:

- Select a photo, then choose Stacks > Promote, or press Command-Left Bracket ([).
- Drag the photo over the photo location you want until you see a green bar appear, then release the mouse button.

To demote a photo in a stack

Do one of the following:

- Select a photo, then choose Stacks > Demote, or press Command-Right Bracket (]).
- Drag the photo over the photo location you want until you see a green bar appear, then release the mouse button.

Adding Photos to and Removing Photos from Stacks

You can add photos to and remove photos from stacks at any time. You can drag photos into or out of a stack, and you can also drag photos from one stack to another.

To add a photo to a stack

Do one of the following:

- Select the photos in a stack and the photo you want to add to the stack, then choose Stacks > Stack (or press Command-K).
- Drag the photo into an expanded stack.

To remove a photo from a stack

Do one of the following:

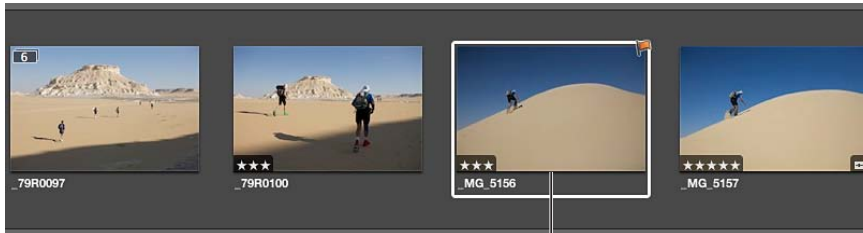
- Select the photo, then choose Stacks > Extract Item (or press Shift-Option-K).
- Drag the photo out of an expanded stack.

Splitting Stacks

You can split a stack into multiple stacks to refine the organization of your photos. All photos remain stacked, but they are now part of new stacks. The photo selected as the splitting point becomes the pick for the new stack.

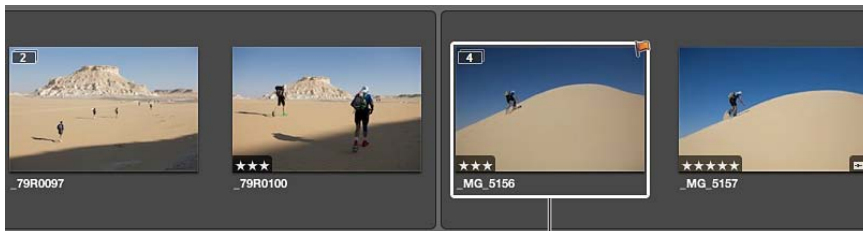
To split a stack

- 1 In an expanded stack, select the photo that you want as the first photo in a new stack.



Select the photo you want as the first image in the new stack.

- 2 Choose Stacks > Split Stack (or press Option-K).



The selected image becomes the pick in the new stack, which is marked with a white outline.

The selected photo becomes the pick of the new stack.

Dragging Stacks

You can drag an entire stack to a new location, and you can drag specific photos within a stack to a new location. When a stack is closed, dragging the stack moves the entire stack. When a stack is open, you can drag individual photos to new locations in the Browser. You can also drag photos into a stack. If you drag a photo within a stack into a different project, however, the entire stack moves to the new location.

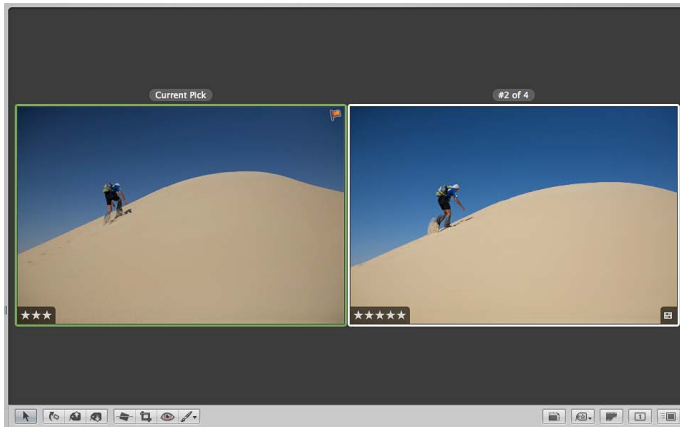
When you drag a stack into a webpage album, web journal album, book album, or slideshow album, the entire stack appears in the Browser, but only the stack picks can be used for publication in webpages, web journals, books, and slideshows.

Comparing Photos in Stacks

To help with the photo editing process, you can set the Viewer and Browser to automatically open a selected stack and set up the stacked photos for comparison. The pick of the stack is set as the “compare” photo. This stack-viewing feature also works in Full Screen view.

To set the Viewer to automatically open and compare the photos in stacks

- Choose View > Main Viewer > Stack (or press Option-T).



The compare photo is surrounded by a green border, and the alternate photo is surrounded by a white border.

Tip: When the Viewer is in Stack mode, you can press the Up Arrow and Down Arrow keys to move from stack to stack.

To select another alternate photo

- Press the Left Arrow and Right Arrow keys.

To select another stack

- Press the Up Arrow and Down Arrow keys.

To promote the alternate photo in the stack

- Press Command–Left Bracket ([).

To demote the alternate photo in the stack

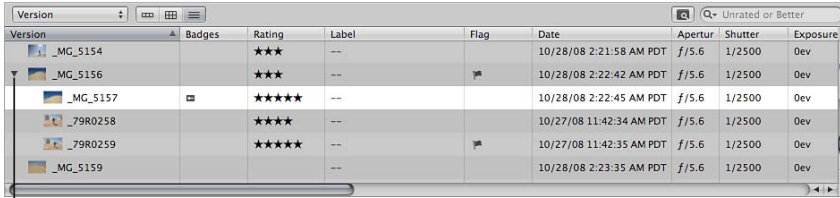
- Press Command–Right Bracket (]).

To set the alternate photo as the stack pick photo

- Press Command–Backslash (\).

Working with Stacks in List View

If you prefer, you can create and work with stacks in list view. You can select photos to stack, select a pick, add and remove photos, and split stacks, just as you can in filmstrip view and grid view.



Version	Badges	Rating	Label	Flag	Date	Apertur	Shutter	Exposure
_MG_5154		★★★	--		10/28/08 2:21:58 AM PDT	f/5.6	1/2500	0ev
_MG_5156		★★★	--	🚩	10/28/08 2:22:42 AM PDT	f/5.6	1/2500	0ev
_MG_5157		★★★★★	--		10/28/08 2:22:45 AM PDT	f/5.6	1/2500	0ev
_79R0258		★★★★★	--		10/27/08 11:42:34 AM PDT	f/5.6	1/2500	0ev
_79R0259		★★★★★	--	🚩	10/27/08 11:42:35 AM PDT	f/5.6	1/2500	0ev
_MG_5159			--		10/28/08 2:23:35 AM PDT	f/5.6	1/2500	0ev

Click the disclosure triangle to the left of the pick photo to view the photos within the stack.

In list view, a stack is identified by a disclosure triangle beside the name of the pick photo.

To open and close stacks in list view

- Click the disclosure triangle beside the name of the pick photo.

You can work with the photos in a stack in list view by dragging, pressing keyboard shortcuts, or choosing commands from the Stacks menu.

Rating Photos

8

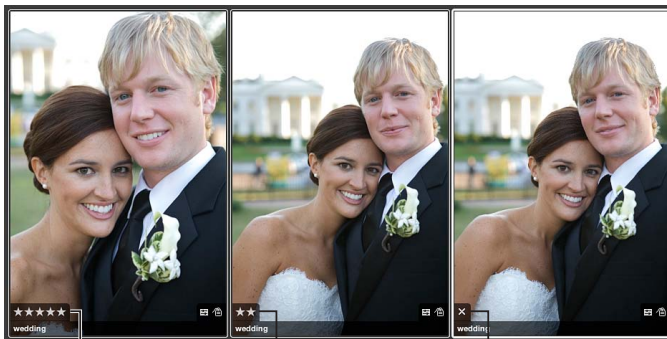
An Overview of the Aperture Rating System

Rating photos is a quick and easy way to narrow down the number of photos you intend to work with. It can also help you locate your best photos later.

After finishing a shoot, photographers typically review their photos and determine which ones are worth working with. Although a “yes or no” appraisal of a photo can work with a small selection of photos, with a larger collection of similar photos that show small variations, photographers need an organized method of noting which photos are superior shots, which deserve further review, and which are poor quality or rejects. A simple and effective rating system can help you narrow the number of photos to focus on during the selection process.

Rating is a simple process with powerful results. If you can easily identify 100 out of 500 photos that aren’t going to work, removing these photos reduces your workload by 20 percent. Rating and thereby reducing your workload can save you a considerable amount of time.

Aperture provides a system for rating photos from Select to Reject. The easily decipherable photo ratings appear on the photos themselves as overlays. Positive ratings appear as stars; you can rate photos from one to five stars, with five being the highest, or Select, rating. A negative, or Reject, rating appears as an X.

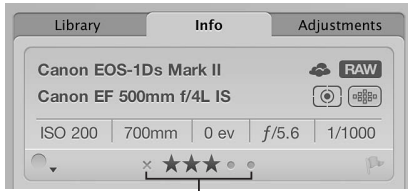


Five stars indicate the highest rating (Select).

Stars indicate a positive rating.

An X indicates a negative rating (Reject).

The process of rating a photo can be as easy as selecting a photo and clicking a rating button in the Info inspector.

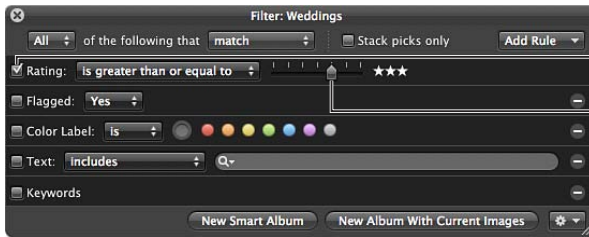


Click a rating button to assign and change photo ratings.

You can also use keyboard shortcuts to quickly assign or change ratings.

You can select and rate multiple photos at once. You can review and rate photos in the Viewer, Browser, and Light Table, as well as in Full Screen view. When you've finished rating photos, Aperture allows you to sort photos according to their ratings.

You can use the Filter HUD to hide or show photos of a certain rating. For example, after an initial rating pass, you can set the Filter HUD to show only those photos that are rated one star. You can then closely inspect and further refine your selection or begin an adjustment pass. Aperture is preset to hide photos that are rated Reject, so you may need to change the Filter HUD settings to see rejected photos.



Make sure this checkbox is selected, then choose an option from the pop-up menu.

Set the slider to a rating.

Aperture provides a set of seven possible photo ratings:

- Five stars, or Select
- Four stars
- Three stars
- Two stars
- One star
- Unrated, or neutral
- Reject

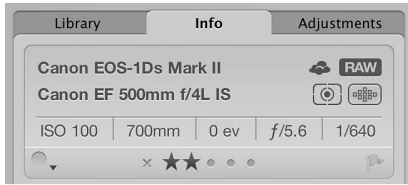
Rejected photos appear with a white X overlay. Positive ratings appear with white star overlays. If no overlays are displayed on the photo, the photo is considered neutral or is not rated. You can rate a single photo or apply a rating to several photos at once.

Rating Individual Photos

You can quickly rate a selected photo using the rating buttons in the Info inspector or in the control bar.

To rate an individual photo using the rating buttons in the Info inspector

- 1 Select a photo.
- 2 In the Info inspector or the Info pane of the Inspector HUD, click a rating button.

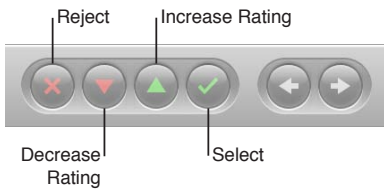


Click a rating button to assign and change photo ratings.

Note: As long as the photo is selected, you can change its rating.

To rate an individual photo using the rating buttons in the control bar

- 1 Select a photo.
- 2 To show the control bar, choose Window > Show Control Bar (or press D).
- 3 Click the rating buttons in the control bar to assign a rating.



- To assign the highest rating to the photo: Click the Select button.
- To assign a rating of Reject: Click the Reject button.
- To increase or decrease the photo rating: Click the Increase Rating or Decrease Rating button.

Note: As long as the photo is selected, you can change its rating.

- 4 To select the next photo, press the Right Arrow or Left Arrow key, or click the Move Selection Left or Move Selection Right button in the control bar.

Rating Multiple Photos

For quick and efficient rating, you use the arrow keys to select photos and then use the appropriate keyboard shortcuts to apply ratings. For more information about keyboard shortcuts used to apply ratings to photos, choose Help > Keyboard Shortcuts.

You can apply a rating to several photos at once. If the photos are already assigned various ratings, you can increase and decrease their ratings by equivalent amounts, such as one star.

To apply the same rating to multiple photos at once

- 1 Select the photos you want to rate.

For more information, see [Navigating Through Photos in the Browser](#) on page 81.

- 2 Click a rating button in the control bar, or press the keyboard shortcut for a rating.



The rating you assign is displayed on all the selected photos.

Sorting Photos by Rating

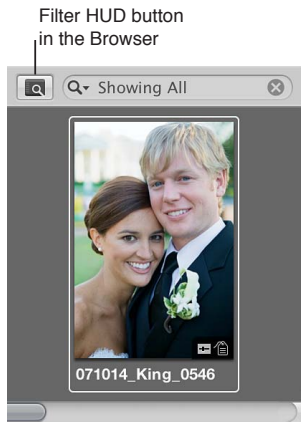
After you've rated your photos, you can sort photos according to a specific rating. For example, after an initial rating pass, you can choose to show only those photos rated Select, with five stars. You can then closely inspect and further refine your selection or begin making image adjustments. You can sort photos by rating using either the pop-up menu in the Browser's search field or the Rating controls in the Filter HUD.

Note: Original image files are not deleted when sorted by rating. They are only temporarily removed from view.

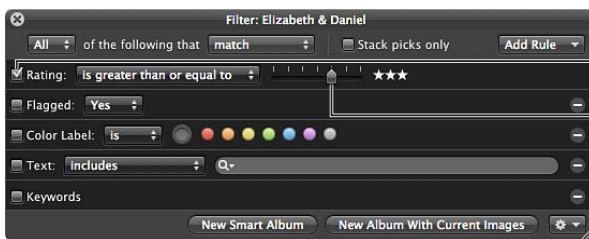
For more information on using the Browser's search field to sort photos by rating, see [Searching for Photos in the Browser](#) on page 94.

To sort photos by rating using the Filter HUD

- 1 Show the Filter HUD by doing one of the following:
 - Choose Edit > Find (or press Command-F).
 - In the Browser, click the Filter HUD button next to the search field.



- 2 Select the Rating checkbox.



Make sure this checkbox is selected, then choose an option from the pop-up menu.

Set the slider to a rating.

- 3 Choose an option from the Rating pop-up menu.
 - *To show photos with a specific rating only:* Choose "is."
 - *To show photos with a specific rating or better:* Choose "is greater than or equal to."
 - *To show photos with a specific rating or worse:* Choose "is less than or equal to."
- 4 Drag the Rating slider to specify a rating.

The Browser instantly displays only photos that meet the specified rating criteria.

To view all photos again

Do one of the following:

- Deselect the Rating checkbox in the Filter HUD.
- Press Control-6.

To view all photos that are unrated or better

- Press Control-Grave Accent (`).

To view rejected photos only

- Press Control-8.

Including Photo Rating in Your Workflow

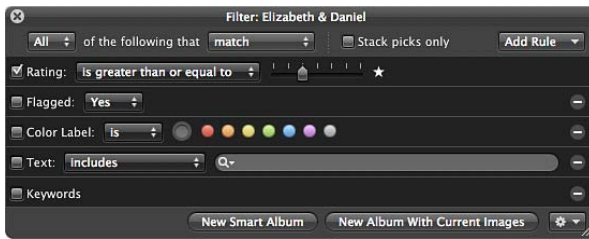
You can use photo rating as part of your workflow to help reduce a large group of photos to a smaller group of preferred photos. Sometimes you can accomplish the selection process in one pass, especially if the group of photos is small. If the group is large, additional rating and culling passes may be necessary.

Rating photos with multiple passes can allow you to take a measured approach to the photo editing process. You can systematically rate photos and then remove levels of rated photos from view to work with your best photos.

Here is a suggested workflow for rating photos in multiple passes.

To rate photos in multiple passes

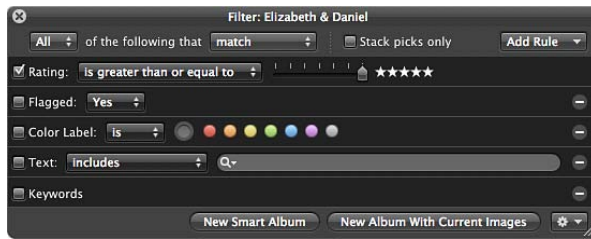
- 1 Begin by assigning a Reject rating to all photos that are clearly unacceptable.
If the Filter HUD is set to show unrated photos or better (the default setting), the rejected photos immediately disappear.
- 2 In the next rating pass, assign positive ratings to any photos that deserve a rating of one star or better. Leave photos you're uncertain about unrated.
- 3 To hide all unrated photos, show the Filter HUD and specify a rating that is greater than or equal to one star as search criteria.



Only photos with a rating of one star or better remain visible in the Browser.

- 4 In the next rating pass, assign a rating of two stars to any photos that are better than one star.
- 5 Change the search criteria in the Filter HUD to show only those photos that are rated two stars or better.
- 6 In the next rating pass, assign a rating of three stars to your photos that are better than two stars.
- 7 Change the search criteria in the Filter HUD to show only those photos that are rated three stars or better.
- 8 In the next rating pass, assign a rating of four stars to your photos that are better than three stars.
- 9 Change the search criteria in the Filter HUD to show only those photos that are rated four stars or better.

- 10 In the next pass, assign a rating of five stars, or Select, to your best photos.
- 11 Specify a rating that is equal to five stars in the Filter HUD.



Only the photos rated Select remain visible in the Browser. Now you can focus on those photos that deserve your attention.

You can also set up a series of Smart Albums in a project, where each Smart Album represents a rating from Reject to Select. As you rate your photos in the project, the Smart Albums gather the photos with matching ratings. You can then review the photos in each Smart Album to verify they belong in the Smart Album's rating category. As you progressively change the ratings on your photos, the contents within the Smart Albums you set up change dynamically to gather the photos that correspond to their rating setting.

For more information about working with Smart Albums, see [An Overview of Smart Albums](#) on page 255.

Comparing and Rating Photos

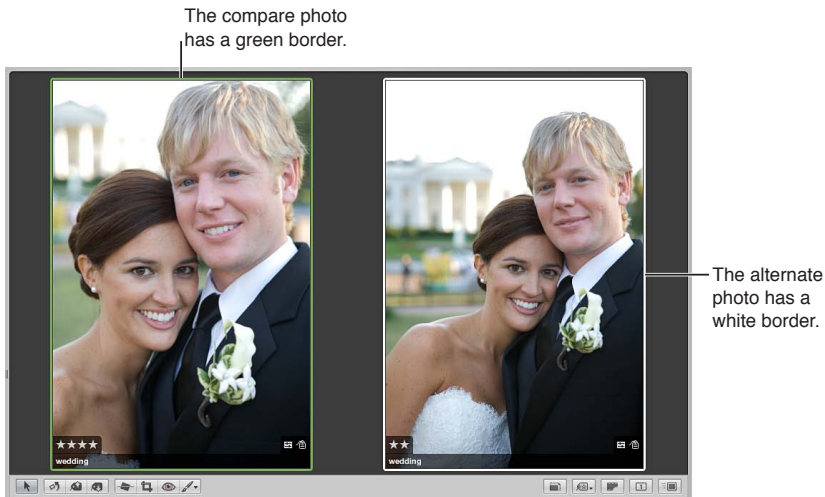
For those really tough decisions, Aperture allows you to compare and rate a Select photo against close alternates. This is particularly useful when you are trying to choose a photo from a small group of similarly composed photos.

For example, choosing the best photo from a series of head shots can be difficult. Even in head shots captured within a short time span, the facial expressions of the subject can change ever so slightly. By comparing photos side by side and rating them, you can more easily choose among like photos.

To compare and rate photos

- 1 Make sure the Browser and Viewer are showing by clicking the Split View button in the toolbar.
- 2 In the Browser, select the photo that appears to be the best.
- 3 To set this photo as the "compare" photo, choose View > Main Viewer > Compare (or press Option-O).

The compare photo appears in the Viewer and the Browser with a green border. The next selected photo appears with a white border immediately to the right of the compare photo. If you want to view another photo against the compare photo, simply select it. The alternate photo you selected appears to the right of the compare photo in the Viewer.



If you have a second display and want to view each photo on a different display, choose View > Secondary Viewer > Span (or press Option-S).

4 Rate your compare photo by doing one of the following:

- *To assign the Select rating:* Press Option-Backslash (\).
- *To increase the compare photo's rating:* Press Option-Equal Sign (=).
- *To decrease the compare photo's rating:* Press Option-Hyphen (-).

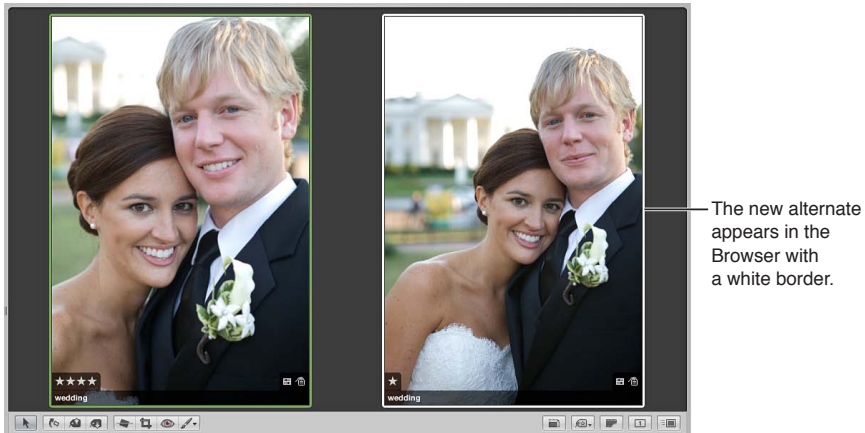
The rating appears as an overlay on the compare photo.

5 Rate the alternate photo by doing one of the following:

- *To assign the Select rating:* Press Backslash (\).
- *To increase the photo's rating:* Press Equal Sign (=).
- *To decrease the photo's rating:* Press Hyphen (-).
- *To assign the Reject rating:* Press 9.

The rating appears as an overlay on the alternate photo.

- 6 Navigate to the next alternate by pressing the Left Arrow or Right Arrow key or by clicking the Move Selection Left or Move Selection Right button in the control bar.



If you discover that the new selection is a better choice or has the best rating, you can make it the compare photo by pressing Return or choosing Edit > Set Compare Item. You can then review and compare your alternates against this photo to confirm it as the best photo.

Tip: To quickly turn off the comparison feature, press Command-Return.

Applying Keywords to Photos

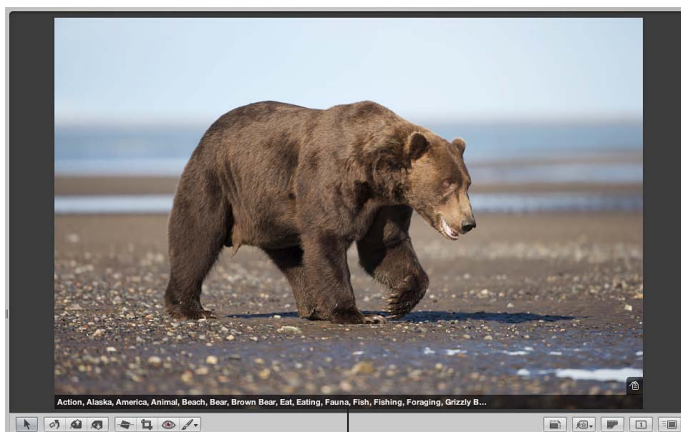
9

An Overview of Keywords

Keywords are descriptive words assigned to photo versions and saved as metadata. For example, a family portrait may include such keywords as *Portrait, Family, Father, Mother, Daughter, Husband, Wife, Park, Client, Select, Purchased*, and more.

Adding keywords to your photos helps you organize your photos and quickly locate specific photos.

After you have applied keywords to your photos, you can have Aperture display a photo's keywords in the Viewer and Browser. You can also view keywords for selected photos in the Info inspector.



Keywords assigned to a photo

You can use the Smart Settings HUD to quickly locate photos by their keywords, and you can use Smart Albums to automatically group photos that have specific keywords assigned. For example, you can create a Smart Album at the library level named *Purchased*, which automatically groups all photos with the keyword *Purchased*. If you want to quickly review the photos your clients bought over time, all you have to do is open the Smart Album named *Purchased*.

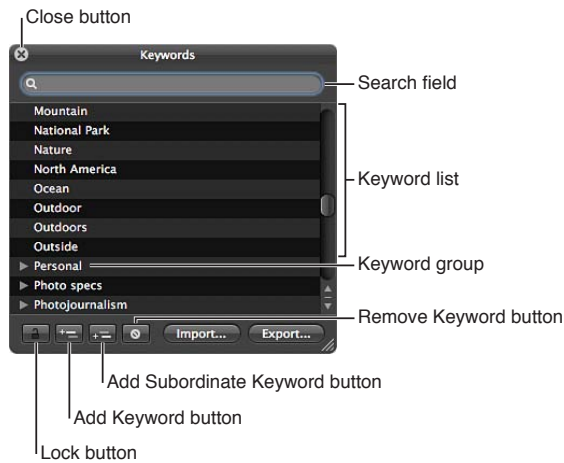
You can also apply keywords to photos based on your future intentions. For example, you can create a Smart Web Page Album that gathers photos that have a *For Web* keyword applied. As you're reviewing your photos, apply the keyword *For Web* to any photo you think is worthy of being published on your website. All photos with the keyword *For Web* are now collected in the Smart Web Page Album. If you later change your mind about publishing a photo on your website, you can always remove the keyword. As soon as you remove the keyword, the photo is removed from the Smart Web Page Album.

If you sell your photos to image libraries, you can export the keywords assigned to your photos as IPTC data. During export, Aperture embeds your keywords individually in the image file as IPTC-compliant keyword fields. The more keywords you apply to your photos, the more likely it is that your photos will be located by potential customers. For more information, see [An Overview of Exporting Photos](#) on page 436.

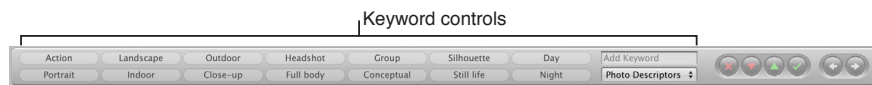
Important: If you are planning to export your keywords as IPTC data, make sure your keyword phrases are no more than 64 characters in length. Longer keyword phrases may not be displayed properly in other IPTC editors or operating systems.

There are several ways to apply keywords:

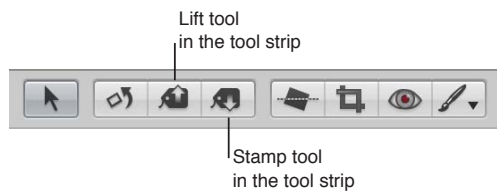
- Using the Keywords HUD



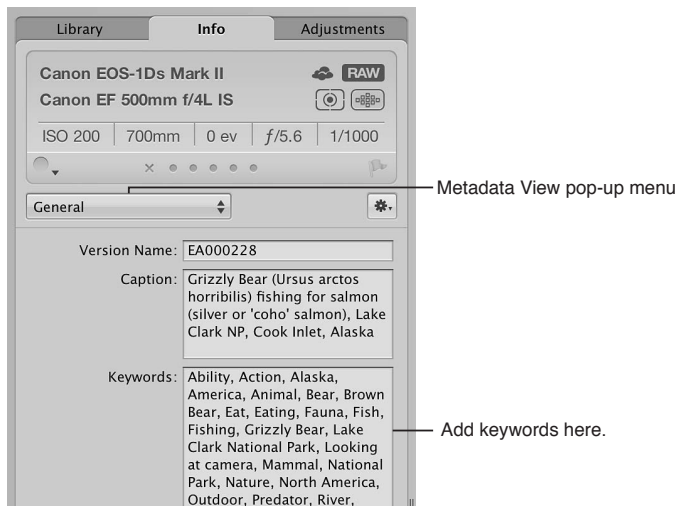
- Using keyword controls, presets, and the keyword field in the control bar



- Using the Lift and Stamp tools via the Lift & Stamp HUD



- Using the Info inspector

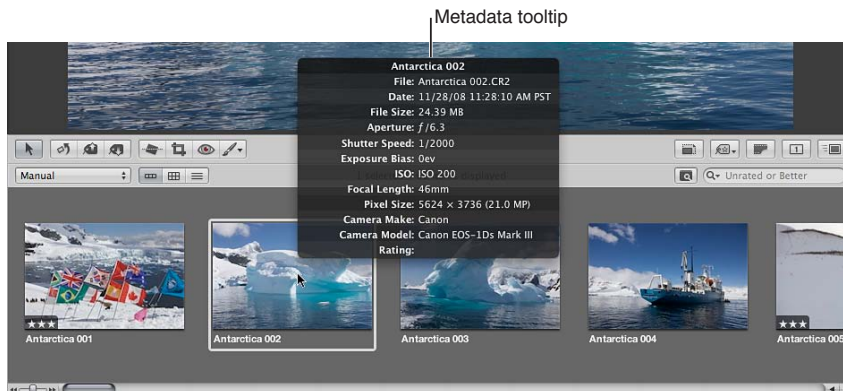


Displaying Keywords in the Viewer and Browser

You can turn on the display of photo keywords in the Viewer and Browser using metadata overlay views. Your keywords are displayed in overlays that appear across the bottom of the photo or below the photo. However, you must choose a metadata view that includes keywords, such as General or Caption & Keywords.

For more information about turning on metadata overlays in the Viewer and Browser, see [An Overview of Metadata Overlays](#) on page 176.

You can also view a photo's keywords using metadata tooltips. When you turn metadata tooltips on, basic metadata, including keywords, is displayed over the photo when you place the pointer over it. You turn metadata tooltips on and off by pressing Control-T.

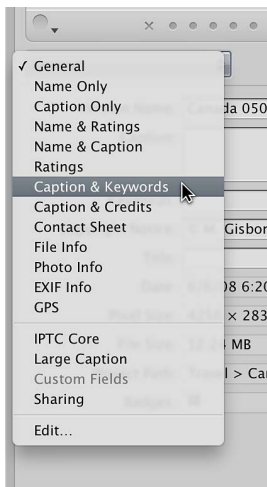


Viewing a Photo's Keywords Using the Info Inspector

The Info inspector and the Info pane of the Inspector HUD provide views of the metadata associated with a selected photo. When you show the Info inspector or the Info pane of the Inspector HUD and then select a photo, you can see the keywords assigned to your photo, including IPTC keywords.

To view a photo's keywords using the Info inspector

- 1 Show the Info inspector by doing one of the following:
 - Choose Window > Show Inspector (or press I), then click the Info tab.
 - Click the Inspector button in the toolbar, then click the Info tab.
- 2 Choose a metadata view that includes keywords, such as General or Caption & Keywords, from the Metadata View pop-up menu.

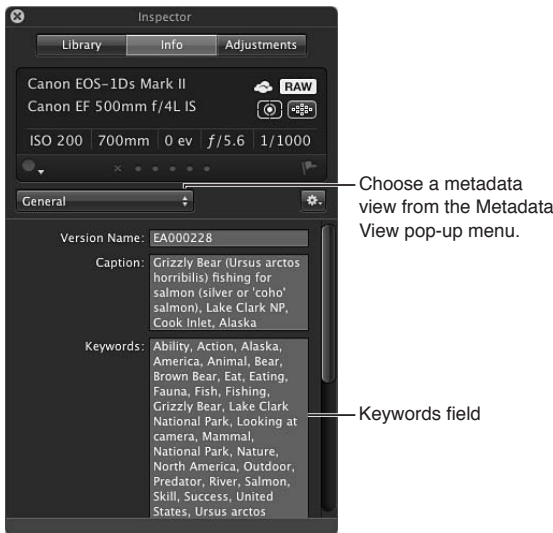


- 3 In the Browser, select a photo to see its keywords.

Any keywords applied to the selected photo appear in the Keywords field of the Info inspector.

To view a photo's keywords using the Info pane of the Inspector HUD

- 1 Show the Info pane of the Inspector HUD by choosing Window > Show Inspector HUD (or pressing H), then click the Info button.
- 2 Choose a metadata view that includes keywords, such as General or Caption & Keywords, from the Metadata View pop-up menu.



- 3 Select a photo to see its keywords.

Any keywords applied to the selected photo appear in the Keywords field of the Info pane of the Inspector HUD.

Viewing Keywords in the Browser in List View

When the Browser is set to list view, Aperture can display a column that shows the keywords assigned to photos.

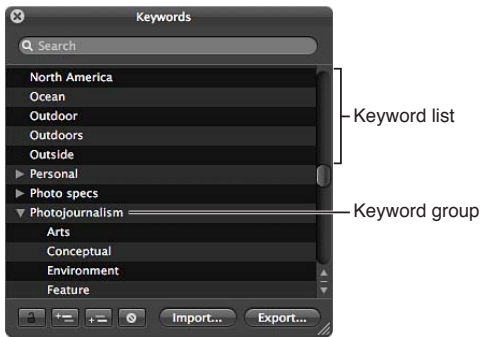
To view keywords in the Keywords column of the Browser

- 1 To set the Browser to list view, click the List View button (or press Control-L).
The Browser switches to list view.
- 2 Choose View > Metadata Display > Customize (or press Command-J).
The Browser & Viewer Metadata dialog appears.
- 3 Select a list view option from the View pop-up menu.
- 4 Make sure the Keywords checkbox is selected in the Metadata Fields column by clicking the IPTC and Content disclosure triangles.
The Keywords checkbox can be found in the Content category.
- 5 Click OK.
- 6 In the Browser, you can resize the Keywords column by dragging the edge of the column heading to view all the keywords assigned to the photo.
The keywords for each photo appear in the Keywords column.

Applying Keywords Using the Keywords HUD

An Overview of the Keywords HUD

The Keywords HUD provides an efficient way to apply keywords to photos. The Keywords HUD contains a library of predefined keywords that you can browse and search. You can also add your own keywords or remove keywords. The Keywords HUD is automatically updated with any keywords you add. For example, when you enter a new keyword in the Info inspector, that keyword also appears in the Keywords HUD. When you change a keyword—by changing its spelling or capitalization, for example—the keyword is updated on all photos that have that keyword assigned.



Using the Keywords HUD to Apply Keywords

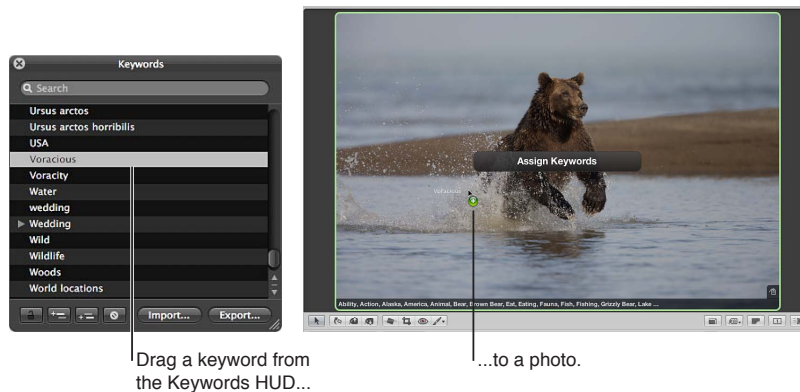
You can use the Keywords HUD to quickly apply keywords to one or more photos. You simply drag keywords to any photo or selection of photos in the Viewer or Browser. When you select a group of photos, you can assign keywords to all the selected photos at once.

To assign a keyword using the Keywords HUD

- 1 To show the Keywords HUD, do one of the following:
 - Choose Window > Show Keywords HUD (or press Shift-H).
 - Click the Keywords button in the toolbar.

The Keywords HUD appears.

- 2 Do one of the following:
 - *If the Browser is in filmstrip view or grid view:* Drag a keyword from the Keywords HUD to a photo or selected photos in the Viewer or Browser.



- *If the Browser is in list view:* Drag a keyword from the Keywords HUD to a photo selection in the Browser list. The keyword appears in the Keywords column for the photo or photos.

Note: Depending on the metadata options you have set, the Keywords column may not appear. For more information, see [Viewing Keywords in the Browser in List View](#) on page 156.

- *If Aperture is set to Full Screen view:* Drag a keyword or keyword group from the Keywords HUD to a photo or selected photos displayed onscreen or in the filmstrip.

The keyword is applied to the photo or selection of photos to which you dragged it. To view keywords applied to photos, see [Displaying Keywords in the Viewer and Browser](#) on page 154.

To apply multiple keywords using the Keywords HUD

- 1 To show the Keywords HUD, do one of the following:

- Choose Window > Show Keywords HUD (or press Shift-H).
- Click the Keywords button in the toolbar.

The Keywords HUD appears.

- 2 To select the keywords you want to apply, do one of the following:

- Hold down the Shift key while pressing the Up Arrow or Down Arrow key to select several keywords.
- Shift-click a group of adjacent keywords.
- Command-click nonadjacent keywords.

The selected keywords are highlighted in the keyword list.

- 3 Drag the keywords from the Keywords HUD to a photo or selection of photos in the Browser, in the Viewer, or in Full Screen view.

The keywords are assigned to the photo or selection of photos to which you dragged them.

Browsing and Searching for Keywords

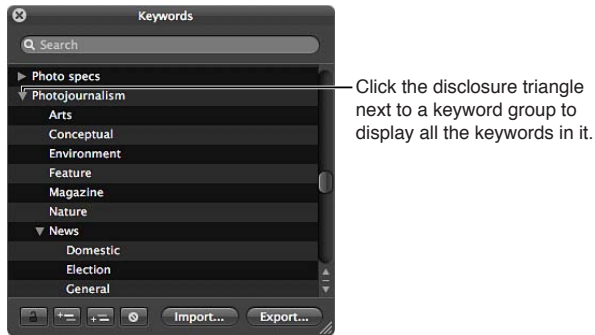
You can browse and search for specific keywords in the Keywords HUD.

To locate a keyword using the Keywords HUD

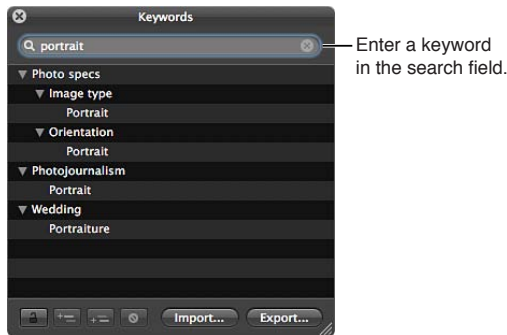
- 1 To show the Keywords HUD, do one of the following:
 - Choose Window > Show Keywords HUD (or press Shift-H).
 - Click the Keywords button in the toolbar.

The Keywords HUD appears.

- 2 Do one of the following:
 - *To browse for a keyword:* Scroll up and down to review the keywords, and click the disclosure triangles to reveal the keywords in each keyword group.



- *To search for a keyword:* Type the keyword you're looking for in the Keywords HUD search field.



The keyword list updates to reveal all instances of the keyword you entered.

Adding Keywords to the Keywords HUD

You can add new keywords to the keyword library of the Keywords HUD. You can also create new keyword groups. For example, if you added the keyword *Fish* to your list, you might want to add *Angelfish*, *Dolphin*, *Tuna*, and *Shark* under the *Fish* keyword to further define your photos.

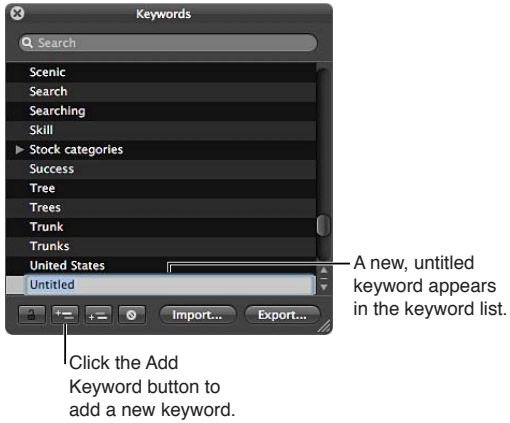
To add new keywords to the keyword library

- 1 To show the Keywords HUD, do one of the following:
 - Choose Window > Show Keywords HUD (or press Shift-H).
 - Click the Keywords button in the toolbar.

The Keywords HUD appears.

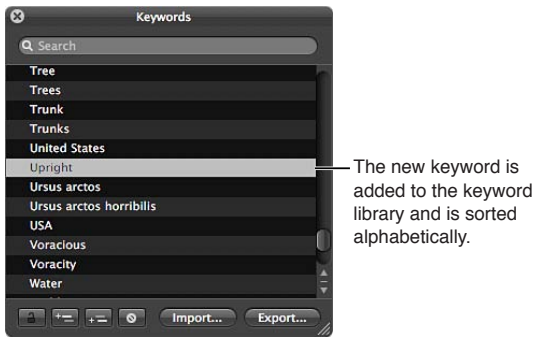
- 2 Click the Add Keyword button.

A new, untitled keyword appears in the keyword list.



3 Type a name for the new keyword, then press Return.

The new keyword is added to the keyword library.

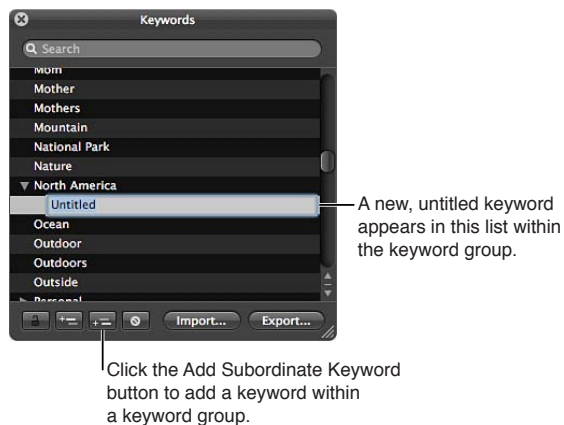


To add keywords to a keyword group

1 In the Keywords HUD, select the keyword group to which you want to add a keyword.

2 Do one of the following:

- Click the Add Subordinate Keyword button, type the new keyword, then press Return.



- Drag an existing keyword into the keyword group.

The new keyword appears in the keyword group you selected, sorted alphabetically within the group.

To create a new keyword group with keywords in it

- 1 In the Keywords HUD, click the Add Keyword button, then type a name for the new keyword group.
- 2 With the new keyword group name selected, click the Add Subordinate Keyword button, type a keyword, then press Return.

The keyword you just added becomes the first keyword in the new group.

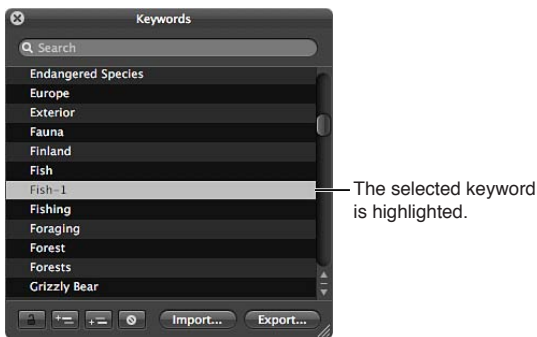
- 3 To add another keyword to the new group, click the Add Subordinate Keyword button, type a keyword, then press Return.

Removing Keywords from the Keywords HUD

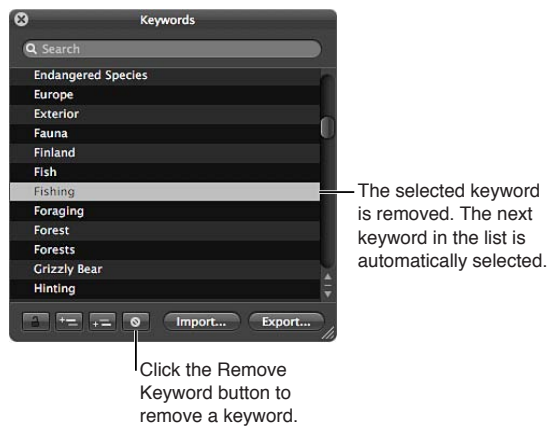
After adding keywords to the keyword library of the Keywords HUD, you may decide not to use certain keywords. If so, you can easily remove them.

To remove a keyword or keyword group from the keyword library

- 1 In the Keywords HUD, select the keyword or keyword group you want to remove.



- 2 Do one of the following:
 - Click the Remove Keyword button.
 - Press the Delete key.



- 3 If the keyword you are attempting to remove is assigned to any photo in your library, a dialog appears, indicating the number of times it's being used. If you still want to remove the keyword, click "Remove from all versions."

Important: Removing a keyword from the keyword library removes it from any photos to which it's already assigned.

Modifying Existing Keywords in the Keywords HUD

When entering a large group of keywords in the Keywords HUD, it's not uncommon to make spelling mistakes. It's easy to modify existing keywords to fix the mistakes.

To modify an existing keyword in the Keywords HUD

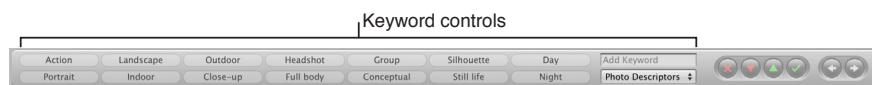
- 1 In the Keywords HUD, double-click the keyword you want to change.
The selected keyword is highlighted, and you can edit it.
- 2 Enter the correction, then press Return.
- 3 If the keyword you are attempting to modify is assigned to any photo in your library, a dialog appears, indicating the number of times it's being used. If you still want to change the keyword, click "Rename in all versions."

Note: If you're planning to enter a large group of keywords, it may be easier to enter them in a tab-delimited text (.txt) file, using an application such as TextEdit, and then import the list of keywords into Aperture. For more information, see [Exporting and Importing Keyword Lists](#) on page 171.

Applying Keywords Using Keyword Controls and Keyword Presets

An Overview of the Keyword Controls in the Control Bar

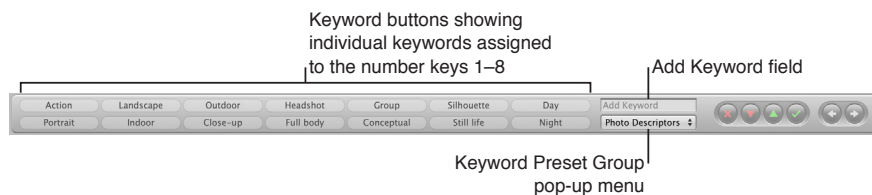
One way to apply and remove keywords is to use the keyword controls located in the control bar. You can add new keywords to photos or apply preset keywords that are part of a keyword group.



The keyword controls are located at the left side of the control bar, but they are not shown by default.

To show the keyword controls in the control bar

- Choose Window > Show Keyword Controls (or press Shift-D).



The following keyword controls appear:

- **Keyword buttons:** These buttons display the preset keywords in the selected keyword preset group. The first eight keywords are assigned to the keyboard shortcut key combination of Option and a number key (1 through 8) on the keyboard. Press Option and a number key on the keyboard (not the numeric keypad) to add the preset keyword to a selected photo, or click a keyword button. The control bar can hold up to 20 keyword buttons. To remove a keyword applied by clicking a button, press Shift-Option and the button's corresponding number key. To remove all keywords, press Shift-Option-9.

- **Add Keyword field:** Type a new keyword in this field and press Return to add it to a selected photo. If the keyword has been used before, Aperture automatically completes the word as you type it. If the Keywords HUD is locked, you are asked whether you want to unlock the Keywords HUD and add the keyword to the keyword library, or not add the keyword to the photo. To remove a keyword you've just applied, type the keyword again and press Shift-Return. Keywords removed using the keyword field are not removed from the Keywords HUD.
- **Keyword Preset Group pop-up menu:** Use this pop-up menu to choose the keyword preset group you want displayed. You can also use the Comma (,) key and Period (.) key to quickly cycle forward and backward through the keyword preset groups. The first eight keywords in the group are assigned to the keyboard shortcut key combination of Option and a number key from 1 through 8.

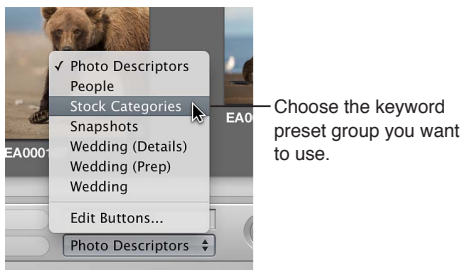
Choosing a Keyword Preset Group

Aperture provides groups of related keywords in sets that you can easily select and use. A group of related keywords is called a *keyword preset group*. You can select a keyword preset group whenever you need it, and you can create your own keyword preset groups that include keywords you frequently use.

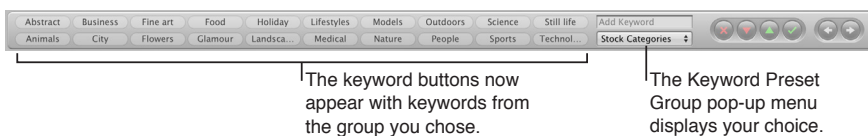
When you choose a keyword preset group, Aperture assigns the specific keywords to keyword buttons in the control bar. This allows you to set the control bar to show the most useful keywords.

To choose a keyword preset group and apply keywords to photos

- 1 Select a photo or group of photos in the Browser.
- 2 In the control bar, choose a keyword preset group from the Keyword Preset Group pop-up menu.



The keyword buttons in the control bar update according to the keyword preset group you chose.



Adding Preset Keywords to Photos Using Keyword Controls

You can easily add a preset keyword to a photo.

To add a preset keyword to a photo

- 1 Select the photo to which you want to assign a keyword.
- 2 In the control bar, choose a keyword preset group from the Keyword Preset Group pop-up menu.
- 3 Do one of the following:
 - Choose Metadata > Add Keyword, then choose the keyword you want from the submenu.

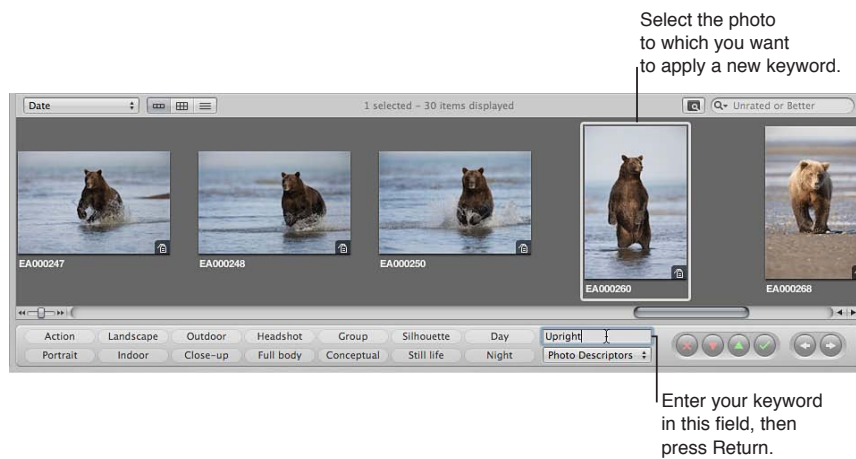
- Press Option and a number key from 1 to 8 to assign one of the first eight keywords.
- Click a keyword button in the control bar.

To remove a preset keyword from a photo

- 1 Select the photo with the preset keyword you want to remove.
- 2 In the control bar, select a keyword preset group from the Keyword Preset Group pop-up menu.
- 3 Do one of the following:
 - Choose Metadata > Remove Keyword, then choose the keyword you want to remove from the submenu.
 - Press Shift-Option and a number key from 1 to 8 to remove one of the first eight keywords.
 - Shift-click the keyword button in the control bar.

To apply a new keyword using the keyword controls

- 1 In the Browser, select a photo or group of photos.
- 2 In the control bar, type the new keyword in the Add Keyword field, then press Return.



The keyword you entered is now applied to the photo or group of photos.

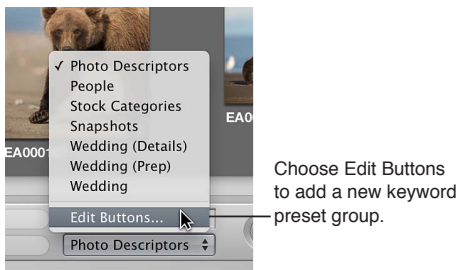
For information about viewing keywords applied to photos, see [Displaying Keywords in the Viewer and Browser](#) on page 154.

Creating a Keyword Preset Group

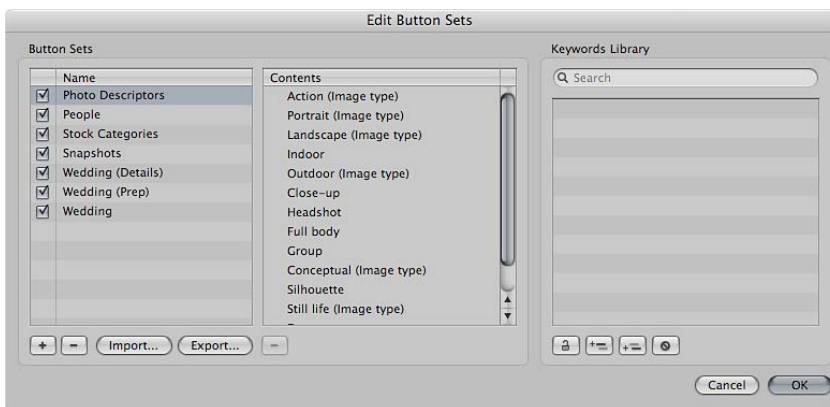
You can create new keyword preset groups when you need them.

To create a keyword preset group and assign keywords to it

- 1 In the control bar, choose Edit Buttons from the Keyword Preset Group pop-up menu.



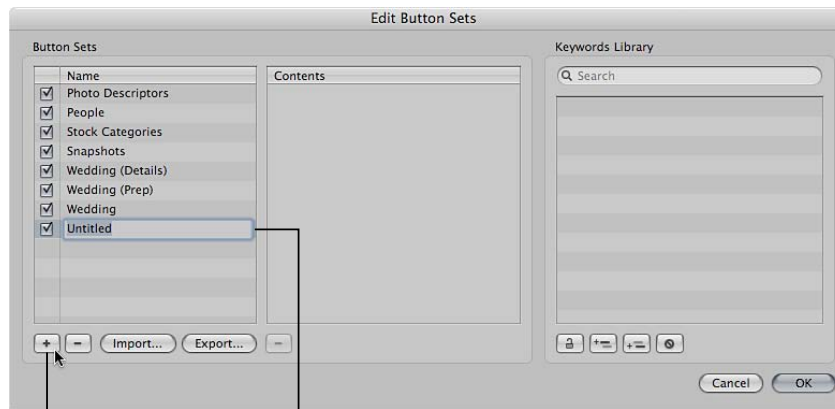
The Edit Button Sets dialog appears.



The Name column on the left lists the keyword preset groups that already exist. When you select a keyword preset group in this column, the keywords included in the group appear in the center Contents column. You add or remove keywords by adding them to or removing them from the Contents column. The Keywords Library column provides a list of the existing keywords in your keyword library. You can drag keywords from this list into the Contents column. You can also add keywords and keyword groups to your keyword library using the controls below the Keywords Library column.

- 2 To create a new keyword preset group, click the Add (+) button.

An untitled keyword preset group appears in the Name column.

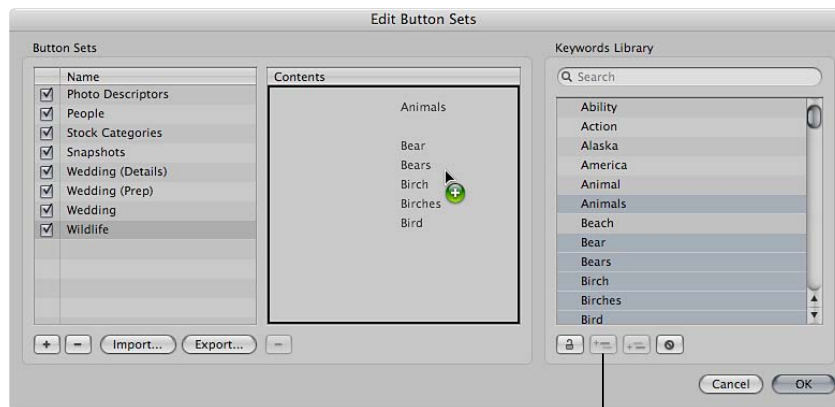


Click the Add button to add a keyword preset group.

A new, untitled preset group appears in this list.

- 3 Type a name for the new keyword preset group, then press Return.

- 4 Drag keywords from the Keywords Library column to the Contents column.



Add Keyword button

If you wish, you can select multiple keywords and drag them to the Contents column at the same time. Hold down the Shift key while pressing the Up Arrow or Down Arrow key to select several keywords, Shift-click to select adjacent keywords, or Command-click to select nonadjacent keywords. If you have a large list of keywords, you can quickly locate the one you're looking for by typing the keyword in the search field. You can also add new keywords to the Keywords Library column by clicking the Add Keyword button. You can then drag the new keywords into the Contents column.

- 5 If you want to rearrange the order of the keywords in the Contents column, drag them into the order you prefer.

The first eight keywords are assigned to the keyboard shortcut key combination of Option and a number key (1 through 8) on the keyboard. To remove a keyword from the column, select it and press Delete, or click the Remove (–) button below the column.

- 6 After arranging the keywords in order, click OK.

The new keyword preset group appears in the Keyword Preset Group pop-up menu.

If the keyword preset group has fewer than eight keywords, the unassigned keys are inactive.

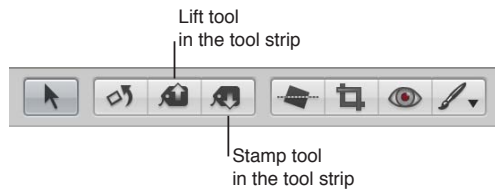
Applying Keywords Using the Lift & Stamp HUD

You can use the Lift and Stamp tools to quickly apply all or some of the keywords from one photo to other photos. Using the Lift and Stamp tools is an efficient way to apply keywords and other types of metadata, such as ratings, to large numbers of photos. The Lift and Stamp tools can also apply adjustments made to photos, such as cropping, straightening, exposure changes, and other adjustments. For more information about using the Lift and Stamp tools to apply adjustments, see [Applying Adjustments to a Group of Images](#) on page 272.

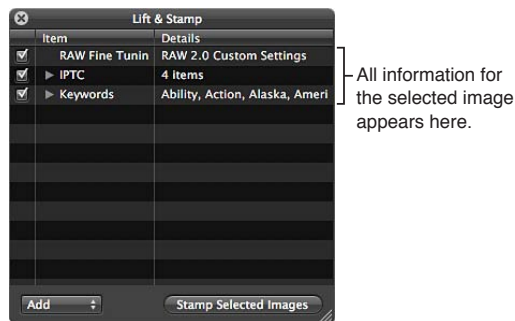
The Lift and Stamp tools have a corresponding HUD you can use to view and remove items you've lifted (copied) from one photo before you stamp (paste) them onto another photo.

To lift all the keywords from a photo and stamp them onto another photo or group of photos

- 1 Select a photo.
- 2 Select the Lift tool (or press O).

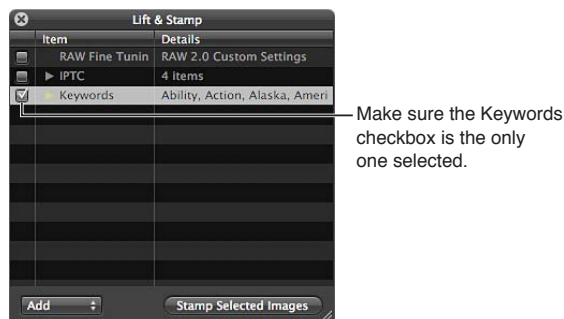


The Lift & Stamp HUD appears.



All the photo's metadata, such as applied adjustments, rating, and keywords, appears in the Lift & Stamp HUD.

- 3 Deselect all checkboxes except for Keywords, or select items in the HUD and press Delete to remove them.



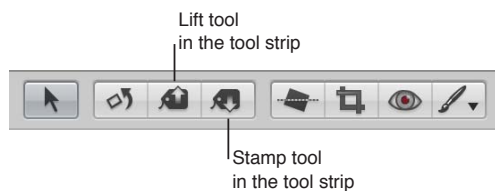
- 4 To apply the keywords from the Lift & Stamp HUD, do one of the following:
 - Use the Stamp tool to select the photos to which you want to assign the keywords.
 - Use the Selection tool to select a group of photos in the Browser, then click the Stamp Selected Images button in the Lift & Stamp HUD.

The keywords from the first photo are applied to all of the photos you stamped them on.

To stamp a reduced selection of keywords onto a photo

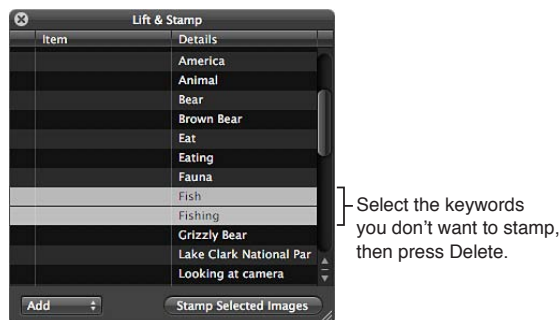
In many cases, you do not want to copy all keywords from one photo and paste them onto another. For this reason, you can select specific keywords that apply to the photo you want to stamp them on.

- 1 Select a photo.
- 2 Select the Lift tool (or press O).



The Lift & Stamp HUD appears.

- 3 In the Lift & Stamp HUD, deselect all image information checkboxes except for Keywords.
- 4 Click the Keywords disclosure triangle to reveal the keywords from the selected photo.
- 5 Remove any keywords you don't want to stamp onto a photo or group of photos by selecting each unwanted keyword in the list and pressing the Delete key.



- 6 To apply the keywords from the Lift & Stamp HUD, do one of the following:
 - Use the Stamp tool to select the photos to which you want to assign the keywords.
 - Use the Selection tool to select a group of photos in the Browser, and then click the Stamp Selected Images button in the Lift & Stamp HUD.

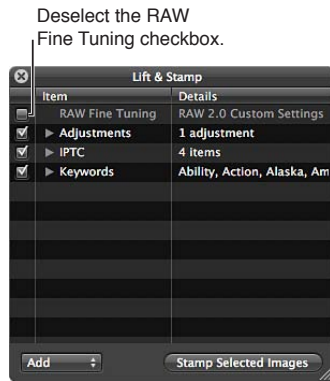
The reduced selection of keywords is applied to the selected photo.

To quickly lift and stamp photo metadata and adjustments

You can quickly lift and stamp the keywords and all other metadata and adjustments from one photo to another using keyboard shortcuts.

- 1 Select a photo, then press Command-Shift-C to lift the metadata from the photo.
- 2 Select a photo or group of photos, then press Command-Shift-V to stamp the metadata onto the selected photos.

You can also lift RAW Fine Tuning parameter values from one RAW image and stamp them onto another. RAW Fine Tuning adjustments are included in lift and stamp operations by default. If you don't want to lift and stamp RAW Fine Tuning adjustments, you must deselect them in the Lift & Stamp HUD. For more information about lifting and stamping adjustments, see [Applying Adjustments to a Group of Images](#) on page 272. For more information about the RAW Fine Tuning adjustments, see [An Overview of the RAW Fine Tuning Controls](#) on page 289.



To exclude everything but metadata from lift and stamp operations

You can use the Lift & Stamp HUD to lift and stamp metadata only.

- 1 Select the photo with the metadata or keywords you want to copy.
- 2 Choose Metadata > Lift Metadata.

The Lift & Stamp HUD appears, showing the metadata and keyword information only.

- 3 Select a photo or group of photos, then click the Stamp Selected Images button.

Only the selected metadata and keywords are applied to the photo selection.

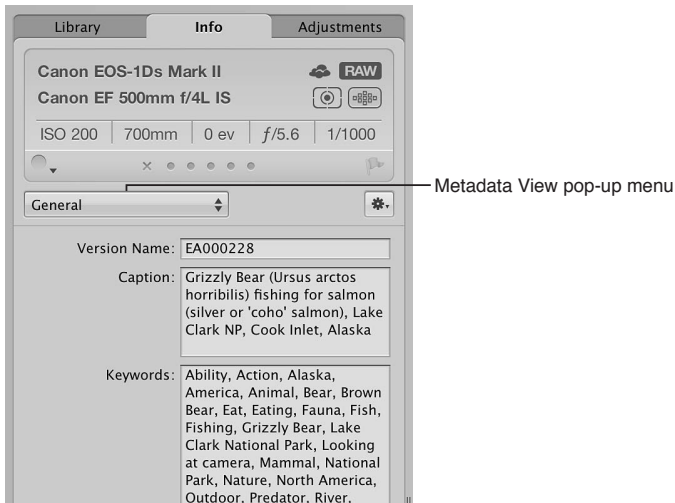
Applying Keywords Using the Info Inspector

When you select a photo, you can use the Info inspector to see the photo's keywords and add new keywords, if needed.

To apply keywords using the Info inspector

- 1 Select a photo.
- 2 Choose Window > Show Inspector (or press I), then click Info.
- 3 Choose Caption & Keywords from the Metadata View pop-up menu.

All keywords assigned to the photo appear in the Keywords field.



- 4 To add a keyword, type a keyword in the Keywords field.

Note: All keywords must be separated by commas (,).

Applying Keywords to Photos in the Light Table

You can use the Light Table to arrange your photo selection in a freeform manner. After arranging your photos into groups, you can apply keywords to a group of photos at once. For example, if you make a Light Table album consisting of the selects from your wedding shoot, you can group the photos according to the part of the wedding event they show. After you've arranged them, you can apply keywords, such as *Getting Ready*, *Wedding*, *Ceremony*, *Formal Shots*, and *Reception*, as appropriate.

To apply keywords to groups of photos in the Light Table

- 1 Select a Light Table album in the Library inspector.
- 2 Click the Keywords button in the toolbar (or press Shift-H).
- 3 In the Light Table or the Browser, select a group of photos to which you want to assign keywords.
- 4 Drag the appropriate keywords from the Keywords HUD to the selected photos.

The keywords are immediately applied to the selected photos.

For more information about using the Light Table, see [An Overview of the Light Table](#) on page 507.

Removing Keywords from a Photo

You can remove keywords that you've applied to a photo.

To remove all keywords from a photo

- 1 Select the photo.
- 2 Choose Metadata > Remove Keyword > Remove All Keywords (or press Shift-Option-9).

To remove specific keywords using the Info inspector

- 1 If the Info inspector isn't shown, click the Inspector button in the toolbar, then click Info.
- 2 Choose Caption & Keywords from the Metadata View pop-up menu.
- 3 In the Keywords field, select and delete any keywords you want removed from the photo.

To remove an individual keyword from a group of photos using keyword controls in the control bar

- 1 Select the group of photos.
- 2 Do one of the following:
 - In the control bar, type the keyword you want to remove in the Add Keyword field, then press Shift-Return.
 - If the keyword is a keyword preset, Shift-click the keyword button in the control bar.

The keyword is removed from the selected photos.

For more information about using the control bar, see [An Overview of the Keyword Controls in the Control Bar](#) on page 162.

Exporting and Importing Keyword Lists

You can export and import keyword lists to share with other Aperture users and transfer to other Aperture systems. You can also create keyword lists for specific projects and then import them as needed. When you export a keyword list, all your keywords are placed in a simple tab-delimited text (.txt) file. The tab-delimited list is set up in a hierarchical structure that matches the hierarchical structure of the Keywords HUD.

To export a keyword list

- 1 Do one of the following:
 - In the Keywords HUD, click the Export button.
 - In the Edit Buttons Sets dialog, click the Export button.
- 2 In the dialog that appears, give the keyword list a name, choose a location, and click Save.

The keyword list is saved as a text (.txt) file to the location you chose.

To import a keyword list

After you have exported a keyword list, you can transfer the file to another Aperture system and import it. You can also manually create or edit keyword lists using other applications such as TextEdit, and you can import the lists into Aperture as long as they follow a tab-delimited text file structure.

- 1 Do one of the following:
 - In the Keywords HUD, click the Import button.
 - In the Edit Buttons Sets dialog, click the Import button.
- 2 In the dialog that appears, navigate to the keyword list file and click Open.

The Keywords HUD is updated to include all the new keywords from the imported keyword list.

An Overview of Working with Metadata

Information about your photos, including the types of adjustments applied, information recorded by the camera, and descriptive information about the photos, is called *metadata*. In Aperture, you work with three types of metadata.

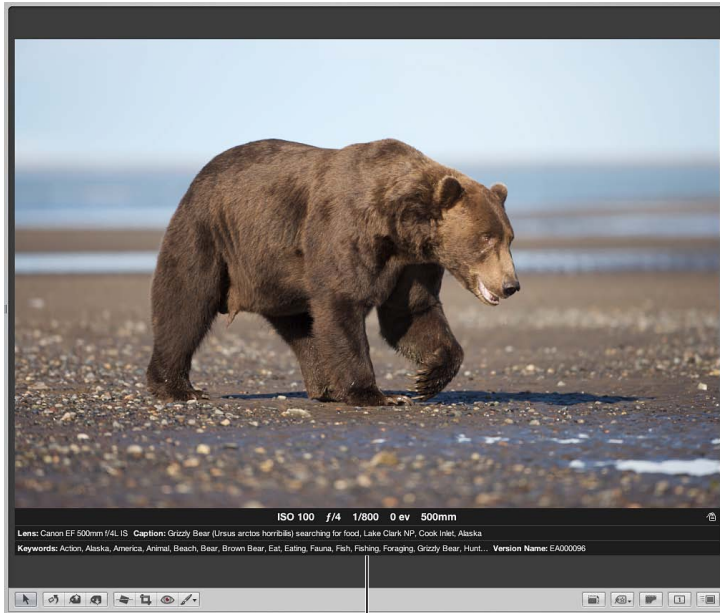
The first type of metadata is called *Exchangeable Image File (EXIF)* data. EXIF metadata is information recorded by the camera and stored in the image file at the time it was shot, such as shutter speed, f-stop, the time the photo was captured, the camera model, and GPS data (for cameras that support it).

The second type of metadata is data you apply to identify and track photos within Aperture, such as a version name, color labels, flags, keywords, when the photo was imported, the types of adjustments applied to it, and how and where it was published.

The third type of metadata is called *International Press Telecommunications Council (IPTC)* data. IPTC metadata is standardized data used by photographers and media organizations to embed keywords, captions, copyright notices, and other information in the image files themselves. You can view and modify IPTC metadata in Aperture.

Note: For more information about working with GPS data in Aperture, see [An Overview of Places](#) on page 208.

You can display different combinations of metadata with your photos in the Viewer and the Browser, as well as in Full Screen view. Aperture provides metadata overlay views, which represent specific combinations of information that you can display as overlays on or just below each photo. For example, you can choose a basic view that shows a photo's version name and caption. Or, you can choose an expanded view that displays a photo's rating, badges, aperture setting, shutter speed, exposure bias, focal length, caption, keywords, version name, ISO speed rating, and file size, as well as the original's location. You can also create your own metadata overlay views.

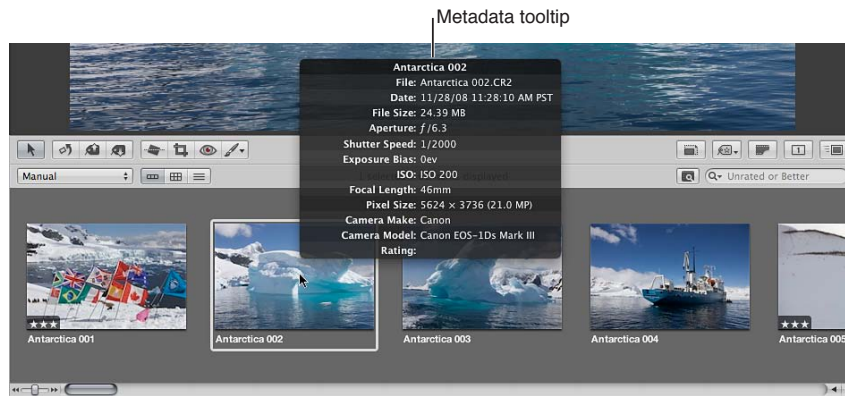


A photo in the Viewer with metadata shown in the expanded metadata overlay view

You can choose different metadata overlay views for the Viewer, the Browser in grid view and filmstrip view, and the Browser in list view. You can also display metadata with labels that help identify the types of metadata being displayed.

Note: Choosing a metadata view for the Viewer also defines the metadata that appears with photos in Full Screen view. Choosing a metadata view for the Browser in grid view defines the metadata that appears with thumbnail images in the Full Screen view filmstrip, as well as the thumbnail images in Full Screen view Browser mode.

When you position the pointer over a photo, Aperture can display information about it in a text box called a *metadata tooltip*. You can turn the display of metadata tooltips on or off using the Metadata Overlays pop-up menu in the tool strip. You can choose a metadata view to specify the combination of metadata that appears in metadata tooltips using the Browser & Viewer Metadata dialog.



You can change the combination of metadata that appears in the Info inspector by choosing a metadata view from the Metadata View pop-up menu. For more information about metadata views, see [An Overview of Metadata Views](#) on page 187.

You can also add the actual metadata you want applied to your photos to the fields of a metadata view and save it as a metadata preset using the Metadata dialog accessed via the Metadata Action pop-up menu in the Info inspector. For more information about metadata presets, see [Creating Metadata Presets](#) on page 191.

You can then use that metadata preset to apply combinations of metadata to photos as you import them or apply a combination of metadata to a group of photos using the Batch Change dialog. For more information about applying combinations of metadata to a group of photos, see [Batch Changing Metadata](#) on page 194.

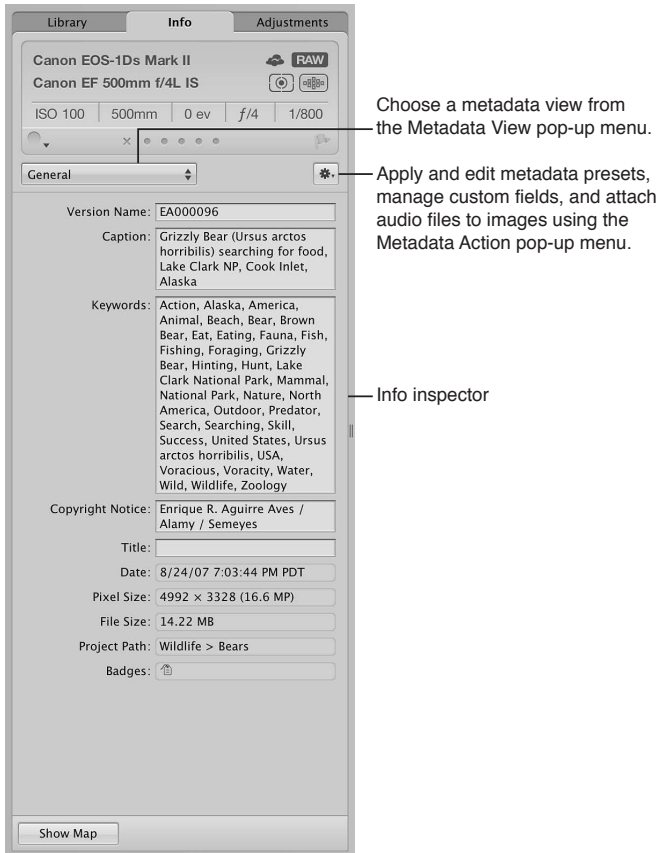
Showing the Info Inspector

You can view the metadata for a selected photo in the Info inspector and the Info pane of the Inspector HUD.

To show the Info inspector

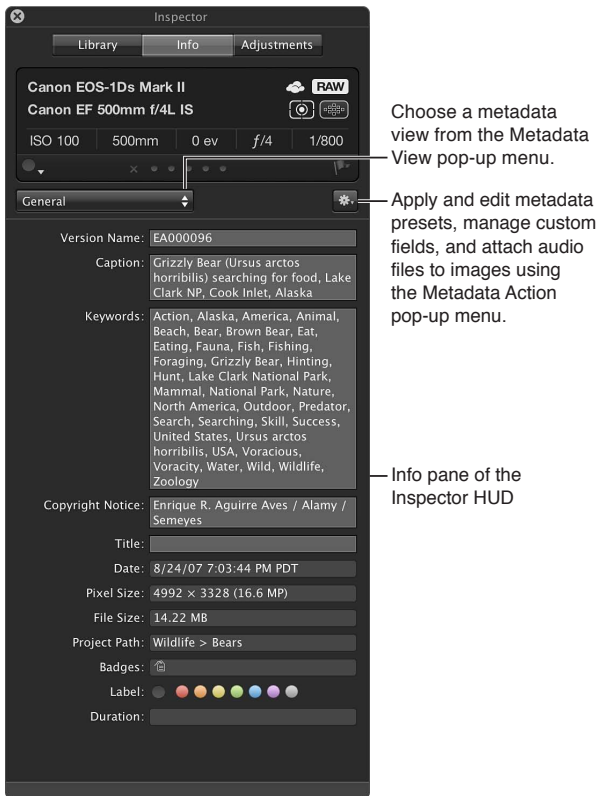
Do one of the following:

- Choose Window > Show Inspector (or press I), then click the Info tab.
- Click the Inspector button in the toolbar, then click the Info tab.



To show the Info pane of the Inspector HUD

- Choose Window > Show Inspector HUD (or press H), then click Info.



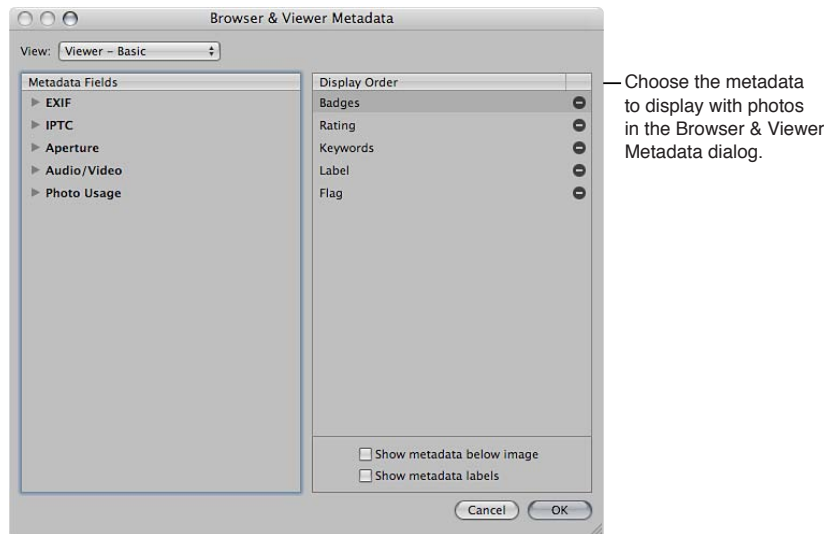
Displaying Metadata with Your Photos

An Overview of Metadata Overlays

You use the Metadata Overlays pop-up menu in the tool strip to turn on and turn off the display of metadata overlays that appear with photos in the Viewer and Browser. You can also use this pop-up menu to turn on and turn off the display of metadata tooltips. You can switch between the “basic” and “expanded” metadata overlay views independently for both the Viewer and Browser. In addition, you access the Browser & Viewer Metadata dialog for the Viewer and Browser using the Metadata Overlays pop-up menu.



You use the Browser & Viewer Metadata dialog to specify the metadata fields to display in the basic and expanded metadata overlay views for both the Viewer and Browser, as well as the metadata that appears in metadata tooltips. You can choose to display a wide variety of EXIF and IPTC metadata fields. In addition, you can add Aperture-specific metadata fields, such as rating and version name, as well as photo usage information, such as whether a photo has been emailed or ordered via Apple's print service. You can also specify whether to display the photo's metadata over the lower portion of the photo or below it, and you can choose to display metadata with labels to make it easier to identify the types of metadata being displayed.

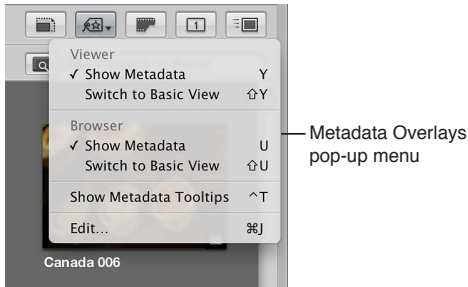


Some metadata overlay views are specifically designed for displaying information in the Viewer, in the Browser in grid view or list view, or in metadata tooltips. The following table lists the metadata overlay views that you can choose and the information that each view displays.

Metadata overlay view	Information displayed
Viewer - Basic	Badges, rating, keywords, labels, and flag
Viewer - Expanded	Rating, badges, label, aperture (f-stop), shutter speed, exposure bias, focal length (35mm), focal length, lens, caption, keywords, version name, date, ISO, file size, and project path
Grid View – Basic	Badges, rating, label, and flag
Grid View – Expanded	Badges, rating, version name, label, and flag
List - Basic	Version name, badges, rating, label, flag, date, aperture (f-stop), shutter speed, exposure bias, ISO, focal length (35mm), focal length, lens, pixel size, orientation, aspect ratio, filename, file size, camera model, import session, and project path
List - Expanded	Version name, badges, rating, label, flag, date, caption, keywords, provider, copyright notice, title, filename, file size, camera model, import session, project path, aperture (f-stop), shutter speed, exposure bias, ISO, focal length (35mm), focal length, lens, and pixel size
Metadata Tooltips	Version name, filename, date, file size, caption, keywords, aperture (f-stop), shutter speed, exposure bias, ISO, focal length (35mm), focal length, pixel size, camera make, camera model, and rating

Turning the Display of Metadata On or Off

You can turn the display of metadata on and off and switch between metadata overlay views in the Viewer and Browser independently using menu commands or the Metadata Overlays pop-up menu in the tool strip.



To hide or show metadata in the Viewer

Do one of the following:

- Choose View > Metadata Display, then choose Show Metadata from the Viewer section of the submenu (or press Y).
- In the tool strip, choose Show Metadata from the Viewer section of the Metadata Overlays pop-up menu.

To switch to the expanded metadata overlay view in the Viewer

Do one of the following:

- Choose View > Metadata Display, then choose Switch to Expanded View from the Viewer section of the submenu (or press Shift-Y).
- In the tool strip, choose Switch to Expanded View from the Viewer section of the Metadata Overlays pop-up menu.

To switch to the basic metadata overlay view in the Viewer

Do one of the following:

- Choose View > Metadata Display, then choose Switch to Basic View from the Viewer section of the submenu (or press Shift-Y).
- In the tool strip, choose Switch to Basic View from the Viewer section of the Metadata Overlays pop-up menu.

To hide or show metadata in the Browser in filmstrip view and grid view

Do one of the following:

- Choose View > Metadata Display, then choose Show Metadata from the Browser section of the submenu (or press U).
- In the tool strip, choose Show Metadata from the Browser section of the Metadata Overlays pop-up menu.

To switch to the expanded metadata overlay view in the Browser in filmstrip view, grid view, and list view

Do one of the following:

- Choose View > Metadata Display, then choose Switch to Expanded View from the Browser section of the submenu (or press Shift-U).
- In the tool strip, choose Switch to Expanded View from the Browser section of the Metadata Overlays pop-up menu.

Note: Switching to the expanded view increases the number of columns displayed in list view.

To switch to the basic metadata overlay view in the Browser in filmstrip view, grid view, and list view

Do one of the following:

- Choose View > Metadata Display, then choose Switch to Basic View from the Browser section of the submenu (or press Shift-U).
- In the tool strip, choose Switch to Basic View from the Browser section of the Metadata Overlays pop-up menu.

Note: Switching to the basic view decreases the number of columns displayed in list view.

To turn metadata tooltips on or off

Do one of the following:

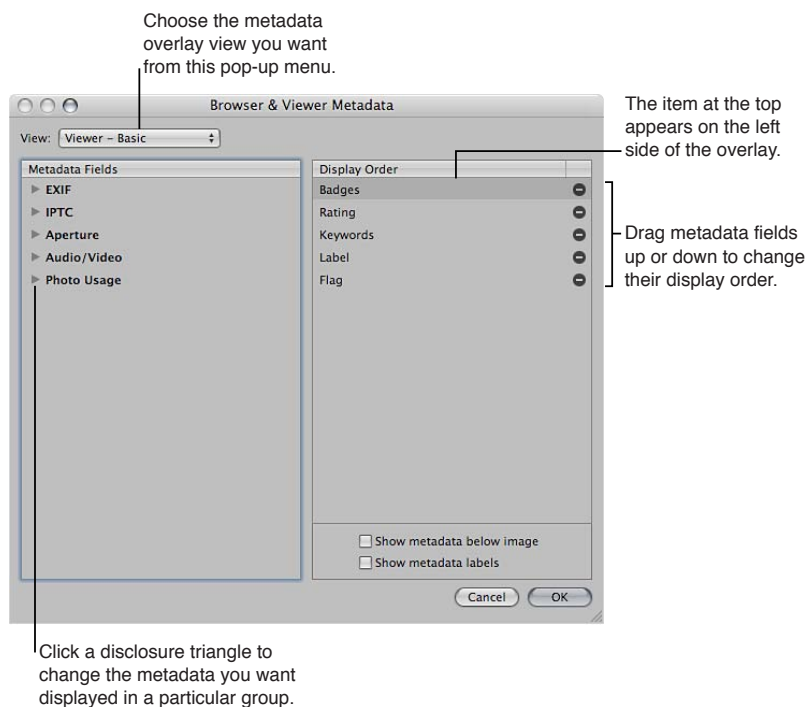
- Choose View > Metadata Display > Image Tooltips (or press Control-T).
- In the tool strip, choose Show Metadata Tooltips from the Metadata Overlays pop-up menu.

A checkmark appears next to the menu item when metadata tooltips are turned on.

Specifying the Type of Metadata to Display in the Viewer and Browser

You use the Browser & Viewer Metadata dialog to specify the types of metadata that are shown in the basic and expanded views for the Viewer, the Browser in grid view and filmstrip view, and the Browser in list view. You can also specify the types of metadata shown in metadata tooltips.

Note: When you choose a metadata overlay view for the Browser in list view, the metadata overlay view determines the number of columns that appear. Each metadata item in the metadata overlay view corresponds to a list view column.



To set the metadata fields that are displayed in a specific metadata overlay view

- 1 Do one of the following:
 - Choose View > Metadata Display > Customize (or press Command-J).
 - In the tool strip, choose Edit from the Metadata Overlays pop-up menu.The Browser & Viewer Metadata dialog appears.
- 2 Choose the metadata overlay view you want to modify from the View pop-up menu.
- 3 In the Metadata Fields column, do any of the following:
 - *To add EXIF information, such as exposure and aperture settings:* Click the EXIF disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata overlay view.
 - *To add IPTC information, such as copyright information and keywords:* Click the IPTC disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata overlay view.
 - *To add Aperture information, such as version name and color labels:* Click the Aperture disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata overlay view.
 - *To add audio and video clip information, such as duration, data rate, and frames per second (fps):* Click the Audio/Video disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata overlay view.
 - *To add information about photo usage, such as whether or not a photo has been printed or emailed:* Click the Photo Usage disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata overlay view.

The selected metadata fields are added to the Display Order column.

- 4 If you want to change the order in which the metadata fields are displayed in the overlay, from left to right, drag the metadata fields in the Display Order column into a new arrangement.
The topmost metadata item in the Display Order column appears on the left side of the overlay.
- 5 When you are satisfied with the metadata fields assigned to the selected metadata overlay view and the arrangement of the metadata fields in that view, click OK.

To remove a metadata field from a metadata overlay view

- 1 Do one of the following:
 - Choose View > Metadata Display > Customize (or press Command-J).
 - In the tool strip, choose Edit from the Metadata Overlays pop-up menu.The Browser & Viewer Metadata dialog appears.
- 2 Choose the metadata overlay view you want to modify from the View pop-up menu.
- 3 In the Display Order column, click the Remove (–) button next to the metadata field you want to remove.
- 4 When you are satisfied with the metadata fields assigned to the selected metadata overlay view and the arrangement of the metadata fields in that view, click OK.

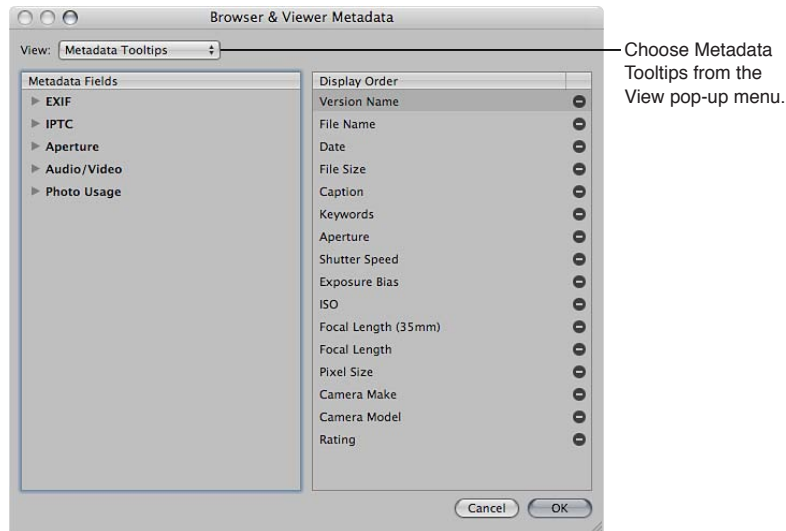
To set the display of metadata in metadata tooltips

1 Do one of the following:

- Choose View > Metadata Display > Customize (or press Command-J).
- In the tool strip, choose Edit from the Metadata Overlays pop-up menu.

The Browser & Viewer Metadata dialog appears.

2 Choose Metadata Tooltips from the View pop-up menu.



3 In the Metadata Fields column, do any of the following:

- *To add EXIF information, such as exposure and aperture settings:* Click the EXIF disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata tooltip.
- *To add IPTC information, such as copyright information and keywords:* Click the IPTC disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata tooltip.
- *To add Aperture information, such as version name and color label:* Click the Aperture disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata tooltip.
- *To add audio and video clip information, such as duration, data rate, and frames per second (fps):* Click the Audio/Video disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata tooltip.
- *To add information about photo usage, such as whether or not a photo has been printed or emailed:* Click the Photo Usage disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata tooltip.

The selected metadata fields are added to the Display Order column.

- ### 4
- If you want to change the order in which the metadata fields are displayed in the tooltip, drag the metadata fields in the Display Order column into a new arrangement.
- ### 5
- When you are satisfied with the metadata fields assigned to Metadata Tooltips view and the arrangement of the metadata fields in that view, click OK.

To set the position of metadata overlays

You can use the Browser & Viewer Metadata dialog to specify whether metadata overlays displayed with photos in the Viewer or in the Browser in grid view or list view appear over the lower portion of the photo or directly beneath it.

- *To display the metadata overlay over the lower portion of the photo:* In the area below the Display Order column of the Browser & Viewer Metadata dialog, deselect the “Show metadata below image” checkbox.
- *To display the metadata overlay directly beneath the photo:* In the area below the Display Order column of the Browser & Viewer Metadata dialog, select the “Show metadata below image” checkbox.

To turn the display of metadata labels on or off

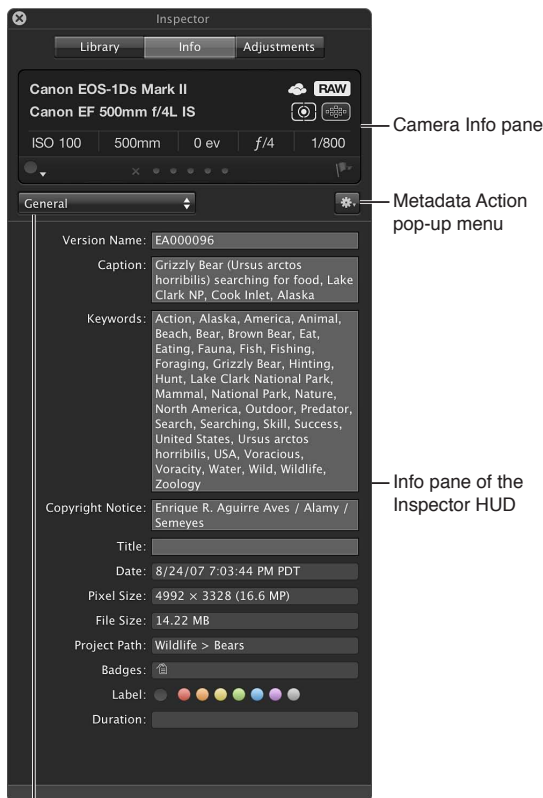
You can use the Browser & Viewer Metadata dialog to specify that a metadata overlay view show metadata with labels. Labels provide the names of the metadata fields and help identify the types of metadata being displayed. In some views, metadata labels are shown by default, but you can turn them off in the Browser & Viewer Metadata dialog. Turning off metadata labels can help save visual space in the selected metadata overlay view, allowing you to add more metadata fields to it.

- In the area below the Display Order column of the Browser & Viewer Metadata dialog, select or deselect the “Show metadata labels” checkbox.

Metadata labels are turned on or off for the selected metadata overlay view. When metadata labels are turned on, they are displayed with the metadata fields they identify.

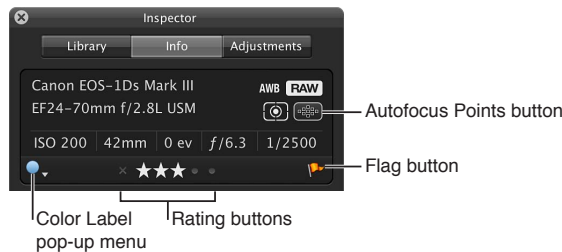
Viewing and Changing Metadata in the Info Inspector and Inspector HUD

You can view or change the metadata for a selected photo in the Info inspector and the Info pane of the Inspector HUD. The selected photo's metadata appears in text fields. You can change the metadata fields shown in the Info inspector and the Info pane of the Inspector HUD by choosing a different metadata view from the Metadata View pop-up menu. You can also modify metadata views by adding EXIF fields, IPTC fields, and other miscellaneous metadata that you specify using the Metadata Views dialog. In addition, you can use controls in the Camera Info pane to add color labels, ratings, and flags to an image selection. If a photo has an audio attachment, you use the controls in the Camera Info pane to listen to the audio as well.



Choose a metadata view from the Metadata View pop-up menu.

The top portion of the Info inspector and the Info pane of the Inspector HUD displays basic camera information about a photo, if it's available. This area is called the *Camera Info pane*. If a video clip is selected, the Camera Info pane displays the length of the video clip, frame size, and number of frames per second. If an audio clip is selected, the Camera Info pane displays the length of the audio clip, the bit rate, and the type of audio file. In addition to displaying basic camera information, the Camera Info pane also contains controls for applying color labels, ratings, and flags to photos, and for displaying autofocus point overlays indicating which part of the image the camera focused on.



To add a color label, rating, or flag to a photo

- 1 In the Info Inspector or the Info pane of the Inspector HUD, choose Show Camera Info from the Metadata Action pop-up menu.
- 2 In the Camera Info pane, do any of the following:
 - *To add a color label to a photo:* Choose a color label from the Color Label pop-up menu.
 - *To assign a rating to a photo:* Click the rating button corresponding to the rating you want to apply to the photo.
The leftmost button assigns a Reject rating, and the rightmost button assigns a rating of five stars (or Select).
 - *To flag a photo:* Click the Flag button, or press Slash (/).
Click the Flag button again to remove the flag from the photo.

To show autofocus point overlays

If your camera saves autofocus EXIF metadata that's compatible with Aperture, you can have Aperture display the autofocus points over the image. The autofocus points used to focus the image appear in red.

- In the Camera Info pane, click the Autofocus Points button (or press Option-F).
Tip: You can temporarily display the autofocus point overlays on an image by placing the pointer over the Autofocus Points button in the Camera Info pane. The autofocus points overlays disappear when you move the pointer away from the Autofocus Points button.

To switch metadata views in the Info inspector and the Info pane of the Inspector HUD

You can change the metadata fields shown in the Info inspector and the Info pane of the Inspector HUD by choosing a different metadata view from the Metadata View pop-up menu.

- 1 Do one of the following:
 - *To show the Info inspector:* Click the Inspector button in the toolbar (or press I), then click the Info tab.
 - *To show the Info pane of the Inspector HUD:* Choose Window > Show Inspector HUD (or press H), then click Info.
- 2 Choose a metadata view from the Metadata View pop-up menu.

- 3 To change the metadata in a text field that can be edited, click in the text field to make it active, then enter the text you want.

To change the metadata for a photo

- 1 Select a photo.
- 2 In the Metadata View pop-up menu, choose a metadata view that contains the metadata fields you want to change.
- 3 Click in a text field to make it active, then enter the text you want.

Note: Not all metadata fields can be edited. Most EXIF metadata fields cannot be changed.

To rearrange the metadata fields in a metadata view

- Drag the metadata labels into the arrangement you want.

To show and hide the Large Caption field

To quickly add caption text to all of your photos, you can set the Info inspector and the Info pane of the Inspector HUD to show an enlarged version of the Caption field by itself. Then you apply the caption text to each selected photo by entering it in this space.

- In the Info inspector or the Info pane of the Inspector HUD, choose Large Caption from the Metadata View pop-up menu.

To listen to an audio attachment

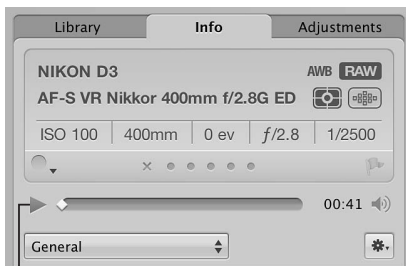
If the photo selected in the Browser has an audio attachment, you can use the Info inspector or the Info pane of the Inspector HUD to listen to it.

- 1 In the Browser, select a photo with an audio attachment.



The audio badge indicates this photo has an audio attachment.

- 2 In the Info inspector or the Info pane of the Inspector HUD, click the Play button.



Play button

Aperture plays the audio attachment. For more information about adding attachments to photos, see [Adding Audio Attachments to Image Files](#) on page 74.

To view the sharing status of a photo

If you've shared photos with your Flickr and Facebook accounts, you can view the status of a photo using the Info inspector. If you downloaded the photo from one of your Flickr or Facebook accounts, the Info inspector displays which account the photo was downloaded from. If you published the photo from Aperture to one of your accounts online, the Info inspector displays the specific Facebook album or Flickr set the photo was published to and when it was published.

- 1 In the Browser, select a photo.
- 2 In the Info inspector or the Info pane of the Inspector HUD, choose Sharing from the Metadata View pop-up menu.

If the photo is shared online, the Info inspector displays either the account it was downloaded from or the specific account and album or set it was published to, along with when it was published. The Info inspector also indicates if the photo has not been shared.

To view and reply to comments that friends post about your Facebook photos

If you've created Facebook albums in Aperture and shared photos from your Aperture library with your Facebook account, you can use the Info inspector to view comments posted about the photos by your friends. Aperture makes it easy to reply to comments that appear in the Info inspector or add your own by opening the appropriate page in your web browser.

- 1 In the Browser, select a photo shared with Facebook.
- 2 In the Info inspector or the Info pane of the Inspector HUD, choose Sharing from the Metadata View pop-up menu.

Comments posted about the selected photo by your friends on Facebook appear in the Info inspector.

- 3 To reply to a comment, click it.

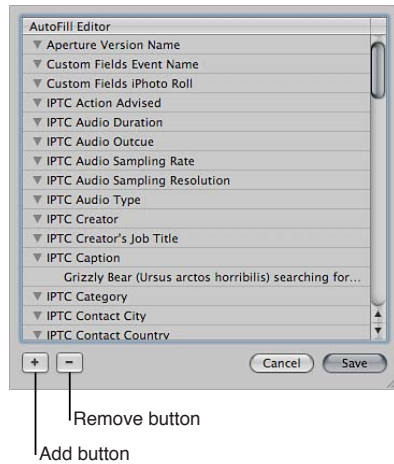
Your Internet browser opens to the Facebook page the photo is posted on. You can post your reply directly in your Facebook account.

Working with the AutoFill Editor

As you enter metadata in the Info inspector's fields, Aperture checks for previous entries, and if it locates a match, it completes the entry for you. For example, if you used the keyword *Landscape* previously, and you type the first few letters of *Landscape* again, Aperture automatically enters *Landscape* in the field. You can set up and change the list of metadata that Aperture automatically enters using the AutoFill Editor. You can enter up to 20 entries for a field type. If you've made a spelling mistake when typing an entry, you can also use the AutoFill Editor to correct the mistake so that Aperture suggests the correct spelling.

To set up autofill entries in the AutoFill Editor

- 1 Choose Metadata > Edit AutoFill List.



- 2 To edit the list, do one of the following:
 - *To add an entry:* Select the metadata type you want to add, click the Add (+) button, and enter the text you want.
 - *To change an entry:* Click the disclosure triangle for a metadata type to display its entries, then double-click the entry you want to change and type the new text.
 - *To delete an entry:* Click the disclosure triangle for a metadata type to display its entries, then select the entry you want to delete and click the Remove (–) button.
- 3 Click Save.

Working with Metadata Views

An Overview of Metadata Views

You can create your own combinations of metadata to display with your photos, called *metadata views*. Using controls in the Info inspector and the Metadata Views dialog, you can either create new metadata views or modify the ones that come with Aperture.

You can also apply combinations of metadata to your photos by recording metadata in a metadata view and saving it as a metadata preset. For more information about creating and using metadata presets, see [Creating Metadata Presets](#) on page 191.

The following table lists the metadata views that you can choose and the information that each view displays.

Metadata view	Information displayed
General	Version name, caption, keywords, copyright notice, title, date, pixel size, file size, project path, and badges
Name Only	Version name
Caption Only	Caption
Name & Ratings	Version name, rating, and badges
Name & Caption	Version name and caption
Ratings	Rating and badges
Caption & Keywords	Version name, caption, and keywords
Caption & Credits	Version name, creator, provider, caption, and copyright notice
Contact Sheet	Version name, caption, label, ISO, focal length, exposure bias, aperture, and shutter speed
File Info	Version name, filename, file size, pixel size, color model, date, and badges
Photo Info	Version name, date, camera model, lens, ISO, focal length, focal length (35mm), exposure bias, aperture, shutter speed, flash, white balance, exposure program, metering mode, exposure mode, focus mode, profile name, and pixel size
EXIF Info	Version name, date, camera make, camera model, serial number, lens, ISO, focal length, focal length (35mm), exposure bias, aperture, shutter speed, flash, flash exposure compensation, white balance, exposure program, shooting mode, metering mode, exposure mode, focus mode, focus distance, file size, pixel size, original pixel size, profile name, aspect ratio, orientation, and depth
GPS	Latitude, longitude, altitude, and compass direction (if available)
IPTC Core	<p><i>Contact:</i> Creator, job title, address, city, state/province, postal code, country, phone, email, and website</p> <p><i>Content:</i> Headline, caption, keywords, IPTC subject code, and caption writer</p> <p><i>Image:</i> Date created, intellectual genre, IPTC scene, location, city, state/province, country, and ISO country code</p> <p><i>Status:</i> Title, job identifier, instructions, provider, source, copyright, and usage terms</p>
Large Caption	Caption field with large text
Custom Fields	Custom metadata fields created using the Manage Custom Metadata fields dialog. Custom fields are for use only in Aperture.

Creating New Metadata Views

You can create new metadata views that display different combinations of metadata.

To create a new metadata view

- 1 Do one of the following:
 - *To show the Info inspector:* Click the Inspector button in the toolbar (or press I), then click the Info tab.
 - *To show the Info pane of the Inspector HUD:* Choose Window > Show Inspector HUD (or press H), then click Info.
- 2 Choose Edit from the Metadata View pop-up menu.

The Metadata Views dialog appears.

- 3 In the Metadata Views dialog, choose New View from the Metadata Views Action pop-up menu.



A new, untitled metadata view appears in the Metadata Views column of the Metadata Views dialog.

- 4 Enter a name for the new metadata view, then press Return.
- 5 In the Metadata Fields column, do any of the following:
 - *To add EXIF information, such as exposure and aperture settings:* Click the EXIF disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata view.
 - *To add IPTC information, such as copyright information and keywords:* Click the IPTC disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata view.
 - *To add Aperture information, such as version name and color label:* Click the Aperture disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata view.
 - *To add audio and video clip information, such as duration, data rate, and frames per second (fps):* Click the Audio/Video disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata view.
 - *To add information about photo usage, such as whether or not a photo has been printed or emailed:* Click the Photo Usage disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata view.
 - *To remove unwanted metadata fields:* Deselect the checkboxes next to the metadata fields you want removed.
- 6 When you are satisfied with the metadata fields assigned to metadata view, click OK.

The new metadata view is added to the Metadata View pop-up menu in the Info inspector and the Info pane of the Inspector HUD. For more information about switching metadata views, see [Viewing and Changing Metadata in the Info Inspector and Inspector HUD](#) on page 183.

Modifying Existing Metadata Views

You can change the combination of metadata that appears in a metadata view. You can add or remove metadata fields, create new ones, and rearrange the order in which the metadata fields are displayed.

Note: You cannot modify the IPTC Core, Large Caption, and Custom Fields metadata views.

To change the metadata fields that appear in an existing metadata view

- 1 Choose Edit from the Metadata View pop-up menu in the Info inspector or the Info pane of the Inspector HUD.
The Metadata Views dialog appears.
- 2 Select the metadata view you want to change in the Metadata Views column.
- 3 In the Metadata Fields column, do any of the following:
 - *To add EXIF information, such as exposure and aperture settings:* Click the EXIF disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata view.
 - *To add IPTC information, such as copyright information and keywords:* Click the IPTC disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata view.
 - *To add Aperture information, such as version name and color label:* Click the Aperture disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata view.
 - *To add audio and video clip information, such as duration, data rate, and frames per second (fps):* Click the Audio/Video disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata view.
 - *To add information about photo usage, such as whether or not a photo has been printed or emailed:* Click the Photo Usage disclosure triangle, then select the checkboxes next to the metadata fields you want to add to the metadata view.
 - *To remove unwanted metadata fields:* Deselect the checkboxes next to metadata fields you want removed.
- 4 When you are satisfied with the metadata fields assigned to the selected metadata view, click OK.

Managing Metadata Views

You can rename, add, or delete metadata views in the Metadata Views dialog.

To rename a metadata view

- 1 Choose Edit from the Metadata View pop-up menu in the Info inspector or the Info pane of the Inspector HUD.
The Metadata Views dialog appears.
- 2 Double-click a metadata view name in the Metadata Views column, then enter a new name and press Return.

To duplicate a metadata view

- 1 Choose Edit from the Metadata View pop-up menu in the Info inspector or the Info pane of the Inspector HUD.
The Metadata Views dialog appears.
- 2 Select the metadata view you want to duplicate in the Metadata Views column, then choose Duplicate View from the Metadata Views Action pop-up menu.

The duplicated metadata view appears in the Metadata Views column immediately below the original metadata view.

To delete a metadata view

- 1 Choose Edit from the Metadata View pop-up menu in the Info inspector or the Info pane of the Inspector HUD.

The Metadata Views dialog appears.

- 2 Select the metadata view you want to delete in the Metadata Views column, then choose Delete View from the Metadata Views Action pop-up menu.

The metadata view is removed from the Metadata Views column of the Metadata Views dialog and from the Metadata View pop-up menu in the Info inspector and the Info pane of the Inspector HUD.

Working with Metadata Presets

Creating Metadata Presets

You can create your own preset combinations of metadata that you can save and then apply to your photos as needed. You create a preset by selecting a version that has metadata applied to it and saving the metadata as a preset. You can also select a version with no metadata applied to it, add the metadata you want to apply to the version, and then save the information as a metadata preset. Your metadata preset is then available to be chosen when you import photos, batch change photos, or modify a photo's metadata in the Info inspector or the Info pane of the Inspector HUD. Aperture also provides easy methods of managing your presets.

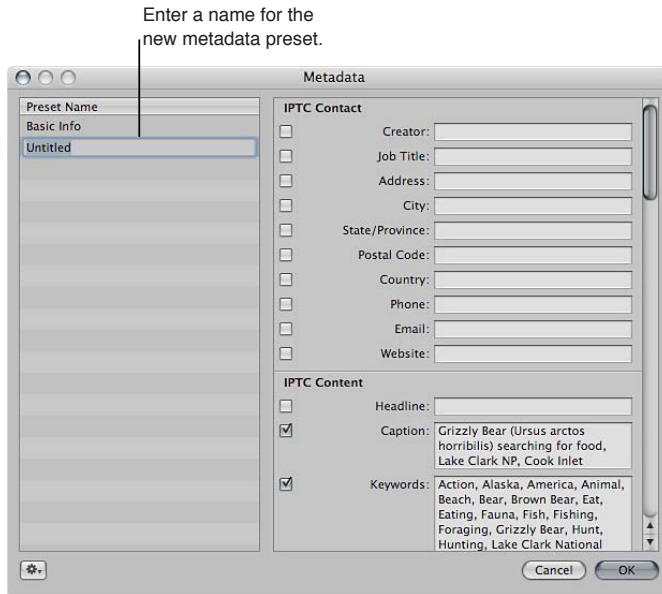
To create a new metadata preset

- 1 In the Info inspector or the Info pane of the Inspector HUD, enter the metadata you want applied to your photos in the metadata fields.

You can add metadata to multiple metadata views by choosing different views from the Metadata View pop-up menu.

- 2 Choose New Preset from Version from the Metadata Action pop-up menu (with a gear icon).

- 3 In the Metadata dialog, enter a name for the new metadata preset, then click OK.



The new metadata preset now appears in the Append with Preset and Replace with Preset submenus of the Metadata Action pop-up menu.

To modify an existing metadata preset

- 1 In the Info inspector or the Info pane of the Inspector HUD, choose Manage Presets from the Metadata Action pop-up menu (with a gear icon).
- 2 In the Metadata dialog, select the preset you want to modify.
- 3 Enter the changes you want to make in the metadata fields on the right side of the Metadata dialog.
- 4 Click OK.

The changes to the metadata preset are saved. If you want, you can rearrange the order of metadata presets in the Append with Preset and Replace with Preset submenus of the Metadata Action pop-up menu. You can also rename and delete metadata presets. For more information, see [Managing Metadata Presets](#) on page 193.

Applying Combinations of Metadata Using Metadata Presets

You can apply metadata presets to selected photos using the Info inspector, the Info pane of the Inspector HUD, or the Batch Change command. You can also apply metadata presets when importing photos using the Import browser. For more information about the Batch Change command, see [Batch Changing Metadata](#) on page 194. For more information about applying metadata presets during import, see [Adding Metadata to Photos During Import](#) on page 65.

To apply a metadata preset when modifying photos with the Info inspector or the Info pane of the Inspector HUD

- 1 Select the photos you want to change.
- 2 In the Info inspector or the Info pane of the Inspector HUD, do one of the following:
 - *To add metadata to the photos, maintaining any currently associated metadata:* Choose Append with Preset from the Metadata Action pop-up menu (with a gear icon), then choose the metadata preset you want.

- *To remove all previously applied metadata to the photos and replace it with a metadata preset:*
Choose Replace with Preset from the Metadata Action pop-up menu, then choose the preset you want to use.

The photo selection is updated with metadata from the metadata preset.

Managing Metadata Presets

You can make changes to the list of metadata presets that appears in pop-up menus.

When you work with other Aperture users or Aperture systems, you can share your metadata presets to ensure a consistent application of metadata to all the photos. You can export metadata presets for others to use and import presets when you need them.

To arrange the metadata preset list

- 1 In the Info inspector or the Info pane of the Inspector HUD, choose Manage Presets from the Metadata Action pop-up menu (with a gear icon).
- 2 In the Metadata dialog, rearrange the order of metadata presets by dragging them to new locations in the Preset Name column.

To rename a metadata preset

- 1 In the Info inspector or the Info pane of the Inspector HUD, choose Manage Presets from the Metadata Action pop-up menu (with a gear icon).
- 2 In the Metadata dialog, double-click the metadata preset name, then type a new name in the field that appears.

To delete a metadata preset

- 1 In the Info inspector or the Info pane of the Inspector HUD, choose Manage Presets from the Metadata Action pop-up menu (with a gear icon).
- 2 In the Metadata dialog, select a metadata preset, then press the Delete key.

To export a metadata preset

- 1 In the Info inspector or the Info pane of the Inspector HUD, choose Manage Presets from the Metadata Action pop-up menu (with a gear icon).
- 2 In the Metadata dialog, select the metadata preset that you want to export, then choose Export from the Action pop-up menu (with a gear icon) in the bottom-left corner of the dialog.
- 3 Choose a location to store the metadata preset information, then click Export.

The metadata preset is exported to the location you chose and saved as *[filename].apmetadata*.

To import a metadata preset

- 1 In the Info inspector or the Info pane of the Inspector HUD, choose Manage Presets from the Metadata Action pop-up menu (with a gear icon).
- 2 In the Metadata dialog, choose Import from the Action pop-up menu (with a gear icon) in the bottom-left corner of the dialog.
- 3 In the dialog that appears, select the metadata preset file that you want to import, then click Import.

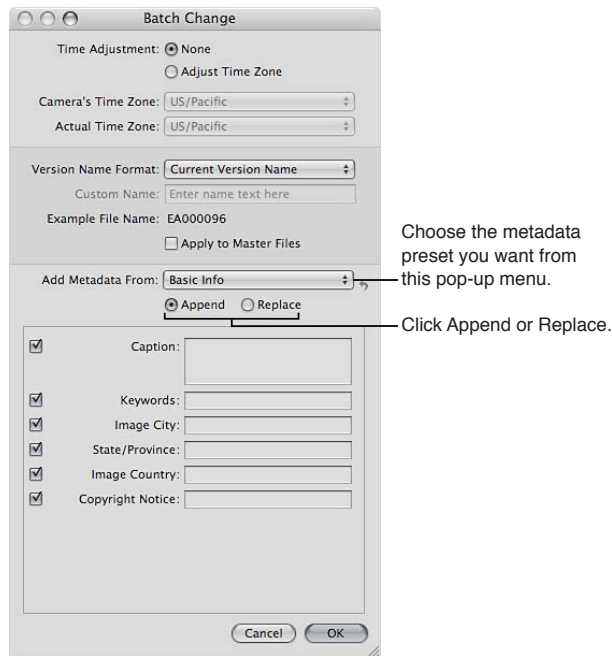
The metadata preset is imported into Aperture and placed at the bottom of the Preset Name column in the Metadata dialog.

Batch Changing Metadata

You can select a group of photos and make metadata changes to all the photos at once. For example, if you need to add the same set of keywords to a selection of photos, or change the version name format, you can select the photos and use the Batch Change dialog to change them.

To change the metadata associated with a selection of photos

- 1 Do one of the following:
 - Choose Metadata > Batch Change (or press Command-Shift-B).
 - In the Info inspector or the Info pane of the Inspector HUD, choose Batch Change from the Metadata Action pop-up menu (with a gear icon).
- 2 In the Batch Change dialog, choose the metadata preset you want from the Add Metadata From pop-up menu.



- 3 Click Append to add the preset's metadata to the photos, maintaining any currently associated metadata, or click Replace to add the preset's metadata to the photos and remove any other associated metadata.
- 4 Enter any additional metadata you want applied in the metadata fields.
- 5 Specify any other metadata options you want to change, then click OK.

About IPTC Metadata

In Aperture, you can import and export IPTC metadata for a photo in an XMP sidecar file. XMP sidecar files are XML files that accompany each photo containing IPTC and other metadata associated with the photo. Any field containing information in the IPTC Core metadata view for a selected photo version can be exported to the XMP sidecar file for that version. The IPTC Core metadata view is compliant with the IPTC Core specification version 1.0. For more information about choosing the IPTC Core metadata view, see [Viewing and Changing Metadata in the Info Inspector and Inspector HUD](#) on page 183. For more information about exporting XMP sidecar files, see [An Overview of Exporting Photos](#) on page 436. For more information about the IPTC Core specification version 1.0, go to <http://www.iptc.org>.

If you intend to export your keywords as IPTC metadata, make sure each keyword entry is no more than 64 characters long. Keyword entries longer than 64 characters may not be displayed properly in other IPTC editors or operating systems.

Here are some examples of common character limits for IPTC fields.

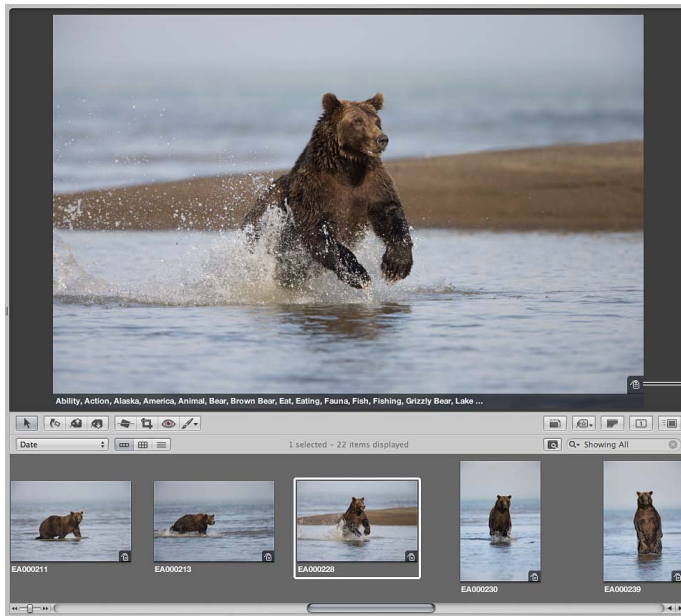
IPTC field and character limit	Description and example
Caption (2000 characters)	A long-form description of the subject and related information in a natural-language caption <i>Example:</i> Mayor Alvarado addresses a crowd at the first soccer match of the season.
Keywords (64 characters)	A list of words describing the subject in discrete words or phrases <i>Example:</i> Politician, Mayor, Futbol, Soccer, News, Game, Team, San Jose
Provider (32 characters)	Photographer's name and/or agency name <i>Example:</i> Matthew Birdsell/Sun Times News
Copyright (128 characters)	Copyright date, photographer's name, agency name, and rights <i>Example:</i> © 2009 Matthew Birdsell/Sun Times News. All rights reserved.
Title (64 characters)	A unique identifier, used by an agency or organization to catalog images <i>Example:</i> mt52642j
Date Created (16 characters)	Date the photo was created <i>Example:</i> 05/16/2009
Image City (32 characters)	City where the photo was captured <i>Example:</i> San Jose
Image State/Province (32 characters)	Province or state where the photo was captured <i>Example:</i> California
Image Country (64 characters)	Country where the photo was captured <i>Example:</i> USA
Instructions (256 characters)	Applicable restrictions, rights, or embargo information <i>Example:</i> MAGS OUT, INTERNET OUT, NO THIRD-PARTY SALES
Creator (64 characters)	The photo byline text <i>Example:</i> © Matthew Birdsell/Sun Times News

IPTC field and character limit	Description and example
Headline (256 characters)	The headline published with the photo <i>Example:</i> Mayor Alvarado Opens New Soccer Season in San Jose
Source (32 characters)	The source that provided the photo <i>Example:</i> Mercury News

Understanding Badge Overlays






Working with Badge Overlays













When you apply adjustments, keywords, or other changes to a photo, Aperture marks the photo with a badge overlay. Badges can appear on photos in the Viewer, the Browser, and the Light Table, in book pages and webpages, and in Full Screen view.



Keywords have been applied to this photo.

The following table shows badges that appear on photos in Aperture.

Badge	Definition
 or 	One or more adjustments have been applied to the photo.
	One or more keywords have been applied to the photo.
	Photos are contained in a stack. The number indicates the number of photos in the stack.
	The photo has been edited with an external editor, and is therefore represented by the original created when the file was exported to the external editor.

Badge	Definition
	The photo is an album's pick photo, the identifying photo for that album, webpage album, web journal album, Light Table album, slideshow album, or book album.
	Because of low image resolution, the photo's print quality may be affected. This badge appears on photos placed in book pages and webpages.
	The number indicates the number of times the photo has been used in a given book, web journal, or Light Table arrangement.
	The photo is a referenced image.
	The referenced image's original is offline.
	The referenced image's original has not been found.
	The photo was downloaded from Photo Stream or imported from a Facebook album or Flickr set online.
	A location has been assigned to the photo.
	The photo has an audio file attached.
	The thumbnail image represents a video clip.
	The photo is part of a RAW + JPEG image pair, and this photo's original is the RAW file.
	The photo is part of a RAW + JPEG image pair, and this photo's original is the JPEG file.

Displaying Photos with Badge Overlays

Badge visibility is determined by the metadata overlay view that is displayed. You can control whether badges are visible by choosing a metadata overlay view that includes badge overlays; you can also control whether badge overlays are visible by turning metadata overlays on or off.

Important: Badge overlays appear only in the Aperture application; they do not appear on photos exported or printed from Aperture.

To display badge overlays on photos in the Viewer

- Do one of the following:
 - Choose View > Metadata Display > Customize (or press Command-J).
 - In the tool strip, choose Edit from the Metadata Overlays pop-up menu.

The Browser & Viewer Metadata dialog appears.
- Choose a Viewer metadata overlay view from the View pop-up menu.
- In the Metadata Fields column, click the Aperture disclosure triangle to reveal the metadata fields below it, then select the Badges checkbox.
- Click OK.
- Make sure both Show Metadata and the metadata overlay view you just modified are selected for the Viewer in the Metadata Overlays pop-up menu in the tool strip.

Badges are now visible in the Viewer.

To display badge overlays on photos in the Browser in grid view

- 1 Do one of the following:
 - Choose View > Metadata Display > Customize (or press Command-J).
 - In the tool strip, choose Edit from the Metadata Overlays pop-up menu.The Browser & Viewer Metadata dialog appears.
- 2 Choose a Browser Grid View metadata overlay view from the View pop-up menu.
- 3 In the Metadata Fields column, click the Aperture disclosure triangle to reveal the metadata fields below it, then select the Badges checkbox.
- 4 Click OK.
- 5 Make sure both Show Metadata and the metadata overlay view you just modified are selected for the Browser in the Metadata Overlays pop-up menu in the tool strip.

Badge overlays are now visible in the Browser.

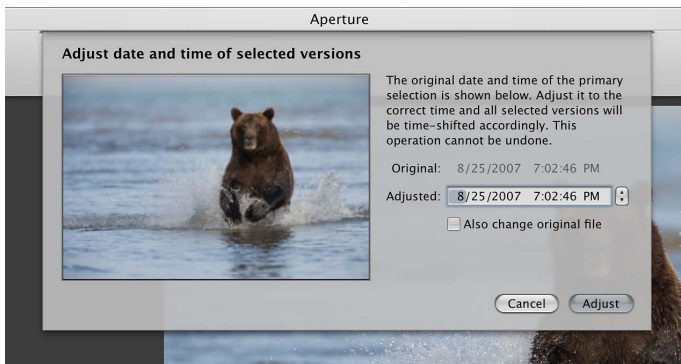
You can turn off the display of badge overlays in the Viewer or in the Browser by turning off the display of metadata. For more information, see [Turning the Display of Metadata On or Off](#) on page 178.

Adjusting the Photo Date and Time

You can adjust the date and time a photo was taken at any time. Aperture gives you the option of adjusting the date and time of a photo's version or the photo's version and original.

To change the creation date of a photo or group of photos

- 1 Select a photo or group of photos.
- 2 Choose Metadata > Adjust Date and Time.



- 3 Enter a new date and time in the Adjusted field.
- 4 If you want to modify the creation date of the original or originals, select the "Also change original file" checkbox.
- 5 Click the Adjust button.

The creation date and time of the version or versions changes. If you selected the "Also change original file" checkbox, the date and time adjustment is applied to the original as well.

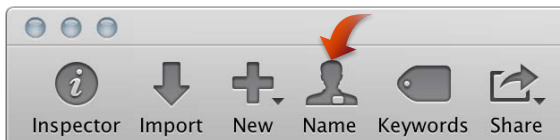
Organizing Photos with Faces

11

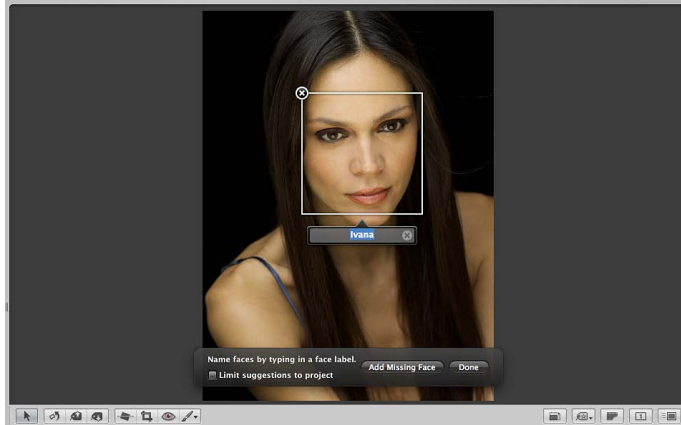
An Overview of Faces

As image libraries grow, it can be difficult to locate every photo with a specific person in it. Rather than painstakingly comb through your entire image library, adding keywords to each photo in order to identify all the people in it, you can use the Aperture face detection and face recognition technology, called *Faces*, to help automate this process.

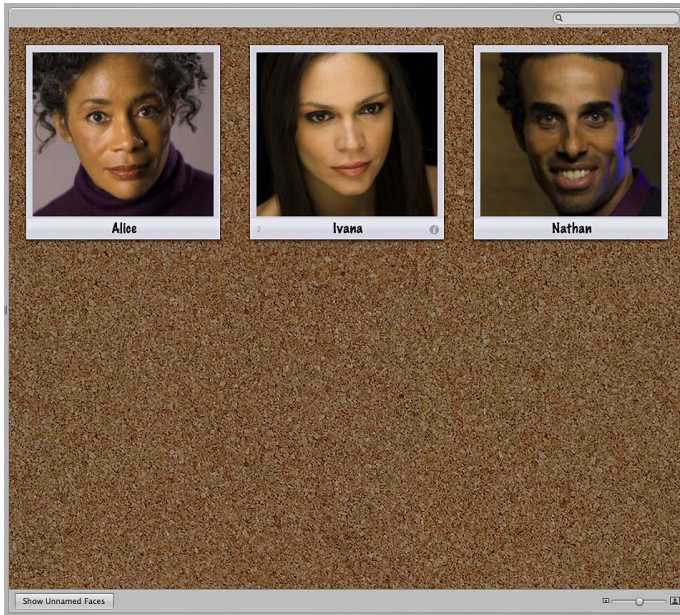
When you upgraded to Aperture 3, Aperture identified all the photos in your library containing faces. This process also occurs when you import photos into Aperture 3. To begin the process of having Aperture identify the people in your photos, you select a photo with a face in it and click the Name button to assign a name to the subject in the photo.



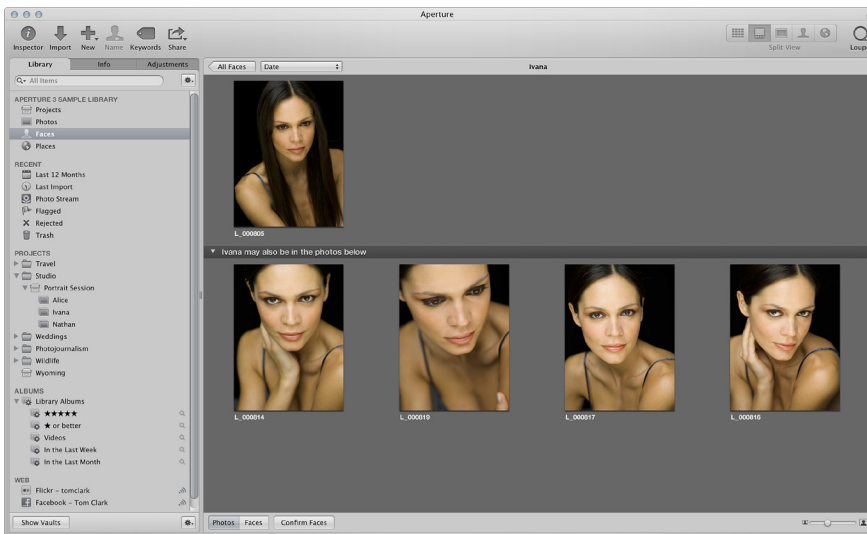
An “unnamed” face label appears below the subject’s face, and you enter the person’s name in the face label.



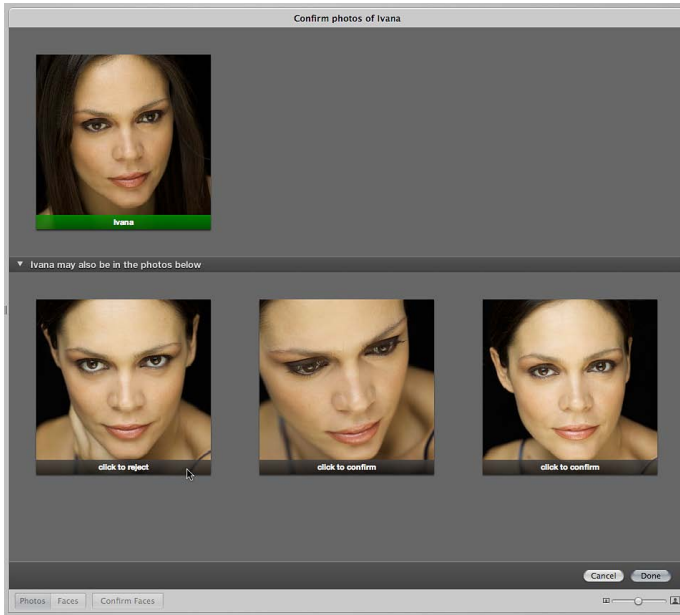
Now that you've identified a person in one of your photos, Aperture presents any photo in your entire image library or within the item selected in the Library inspector that might contain the person you named. You view matching photos by selecting Faces in the Library inspector or by clicking the Faces button in the toolbar. The Aperture main window switches to Faces view, with the snapshot of the person you named appearing at the top. You can slowly move the pointer over the snapshot to skim other confirmed photos of that person.



If you double-click a person's snapshot in Faces view, Aperture presents suggested photos of the person at the bottom of the Faces browser.



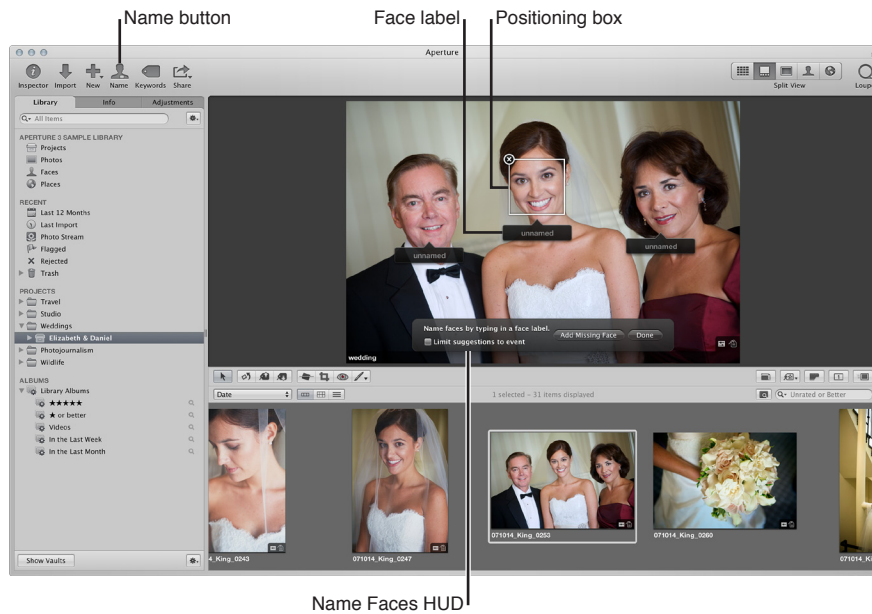
You can click a suggested photo to accept it or reject it as a match.



When you have named all the people in your photos, you can create Smart Albums based on specific people. Whenever you confirm a face that matches the person the Smart Album was created for, the photo is automatically added to the Smart Album. You can also assign Facebook IDs and have Aperture automatically publish the identified photos to your Facebook account.

Adding Names to Faces in Your Photos

To begin using Faces in Aperture, you must first identify the people in your photos by assigning names to their faces.



To assign names to faces in your photos

- 1 In the Browser, select a photo with people in it.
- 2 Click the Name button in the toolbar.

Face labels appear below the faces of the people in the photo in the Viewer.

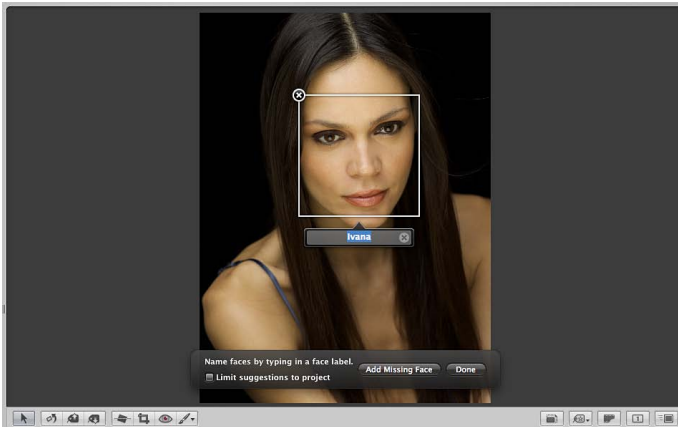
- 3 Click the face label below a person's face and enter the person's name in the text field.

As you enter the person's name, names that have already been assigned to faces, as well as names in your Contacts, are suggested in the face label.

Note: If you want to limit the suggestions to faces you've already named in the project, select the "Limit suggestions to project" checkbox.

- 4 When you are satisfied with the person's name in the face label, press Return.

The person's name appears in the face label.



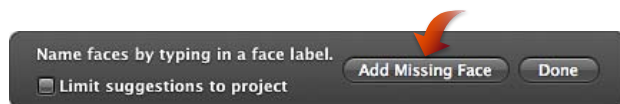
- 5 Enter a name in the face label for each person in the photo, then click Done.

Aperture presents the photos in the library that are suggested matches for the people you just named. For more information about reviewing suggested photos of a person, see [Viewing Photos in Faces View](#) on page 203.

To add missing faces

If there are faces in a photo that Aperture doesn't detect, you can still add face labels to the faces and assign them names.

- 1 If necessary, click the Name button in the toolbar.
- 2 In the Name Faces HUD, click the Add Missing Face button.



A positioning box appears with a face label below it.

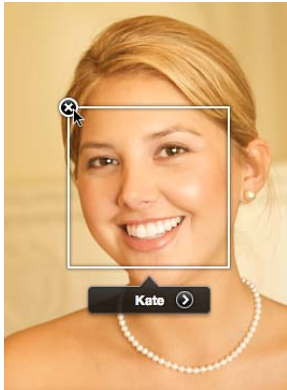
- 3 Drag the positioning box over the face you want to name, and resize the box so that it contains just the face.
- 4 Enter a name in the face label and press Return.
- 5 Repeat steps 2 through 4 until all faces lacking face labels in the photo have been named.

To rename a person in a photo

- 1 Select a photo containing the face of a person you want to rename.
- 2 Click the Name button in the toolbar.
- 3 Select the face label for the person whose name you want to change, and enter a new name in the text field.

To delete a face label

- 1 Select a photo containing a face label you want to remove.
- 2 Click the Name button in the toolbar.
- 3 Position the pointer over the person's face, then click the Remove button at the top-left corner of the positioning box.



The positioning box and face label are removed.

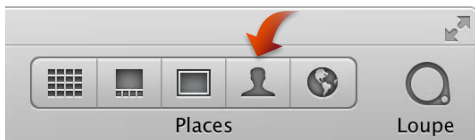
Viewing Photos in Faces View

After you've assigned names to the people in a few of your photos, you can review suggested photos of the same people.

To enter Faces view

Do one of the following:

- In the Library inspector, select Faces.
Selecting Faces in the Library inspector shows the faces identified across the entire library.
- In the Library inspector, select an item, then click the Faces button in the toolbar.



Only faces identified in the selected item in the Library inspector appear in Faces view.

To set a photo as the key photo for a snapshot

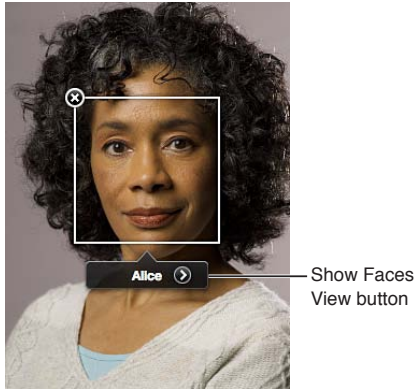
When you enter Faces view, a snapshot of each person you named in the Aperture library appears. You can quickly view the confirmed photos of a person by skimming over the snapshot with the pointer. You can also choose your favorite photo of the person to represent the snapshot, also known as the *key photo*.

- 1 Skim over the snapshot with the pointer.
- 2 When you find your favorite photo of that person, do one of the following:
 - Press the Space bar.
 - Control-click the photo, then choose Make Key Photo from the shortcut menu.

To view all the photos of a specific person

Do one of the following:

- In Faces view, double-click the person's snapshot.
- Click the Name button in the toolbar, then click the Show Faces View button in the face label below the person's face in the Viewer.



The Faces browser appears, showing all the confirmed photos of the person.

To confirm photos of a person

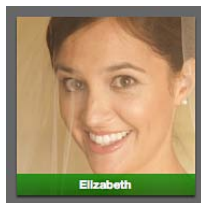
When you first open the Faces browser after assigning a name to a new face, Aperture displays all the suggested photos for that person in the bottom half of the Faces browser.

- 1 At the bottom of the Faces browser, click the Confirm Faces button.



A "click to confirm" overlay appears at the bottom of each suggested photo.

- 2 To confirm a face as a match, do one of the following:
 - *To confirm the face in a single photo:* Click the photo.The person's name appears below the photo.

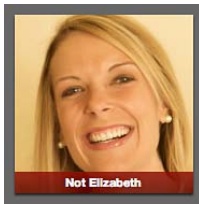


- *To confirm the face in multiple suggested photos:* Shift-click the photos.
- The person's name appears below each photo.

3 To reject a photo as a match, do one of the following:

- Click the photo, then click it again to reject it.
- Option-click the photo.

“Not [name of face]” appears below the photo.



4 When you have finished confirming photos, click Done.

Confirmed photos move to the top of the Faces browser.

Note: As you confirm or reject the face of the person appearing in each photo, you can have Aperture suggest additional photos by pressing the Option key and clicking the Update button. When you press the Option key, the Done button changes to the Update button. Clicking the Update button also saves any confirm and reject decisions you’ve already made.

To customize the Faces browser

As the number of confirmed photos of a person grows, it can be difficult to identify a person’s face in a small thumbnail image. To make it easier to identify a person’s face in a photo, you can either make the thumbnail images larger or switch from showing whole photos to showing only faces.



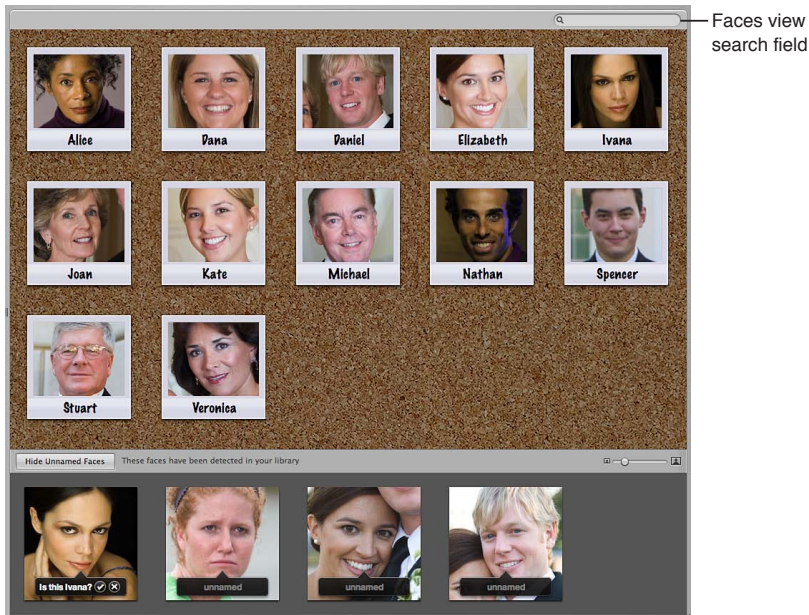
- *To show whole photos:* In the Faces browser, click the Photos button.
The thumbnail images in the Faces browser return to displaying whole photos.
- *To show faces only:* In the Faces browser, click the Faces button.
Each thumbnail image in the Faces browser is cropped to show only the person’s face.
- *To make the thumbnail images larger:* In the Faces browser, drag the Thumbnail Resize slider to the right.
- *To return to Faces view:* Click the All Faces button at the top of the Faces browser.

Searching for Photos by Face

As you name the people that appear in the photos in the library, the number of named faces quickly grows. Locating photos of a particular person is a simple process.

To search for photos by face

- 1 In the Library inspector, select Faces.
- 2 In Faces view, enter the name of the person you are looking for in the search field.



Aperture displays the snapshot of the person whose name you entered in the search field, removing all others from view.

To show all faces again

- In Faces view, click the Reset button (with an X) on the right side of the search field.

Snapshots for all the people identified in the library reappear in Faces view.

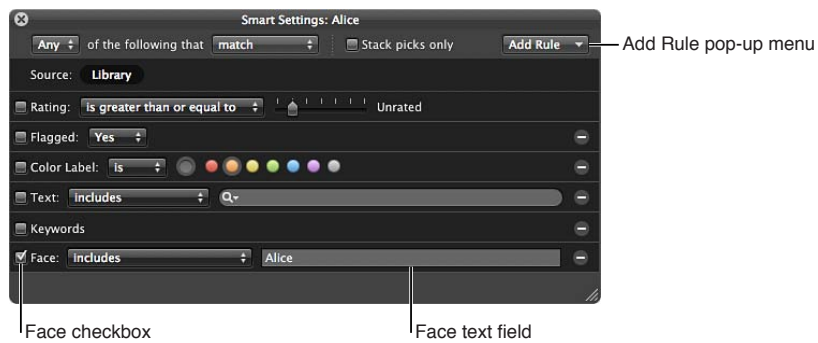
You can use the Filter HUD in the Browser to perform more complex searches for people in your photos. For more information, see [Searching by Face](#) on page 245.

Creating Smart Albums with Photos of People

You can create a Smart Album and specify a person or a group of people as search criteria. For example, you can create a Smart Album that is set to collect photos of your family members. First you create the Smart Album, and then you use the Smart Album's Smart Settings HUD to specify that it collect photos of each individual in your family.

To configure a Smart Album to collect photos of particular people

- 1 In the Library inspector, select Projects.
- 2 Choose File > New > Smart Album (or press Command-Shift-L).
A new, untitled Smart Album appears in the Albums section of the Library inspector.
- 3 Give the Smart Album a name.
- 4 In the Smart Album's Smart Settings HUD, choose Face from the Add Rule pop-up menu.
- 5 Select the Face checkbox, choose "includes" from the Face pop-up menu, then enter the name of the person you want to include in the Smart Album in the text field to the right of the pop-up menu.



- 6 Repeat steps 3 and 4 for each additional person you want added to the Smart Album.
- 7 When you have finished, close the Smart Settings HUD.

To quickly create a Smart Album configured to collect photos of a person

A quick way to create a Smart Album configured to collect photos of a specific person is to drag the snapshot of the person in Faces view to the Library inspector.

- In Faces view, drag the snapshot of the person to the Library inspector.

A Smart Album configured to collect photos of the person appears in the Library inspector, named after the person's snapshot in Faces view.

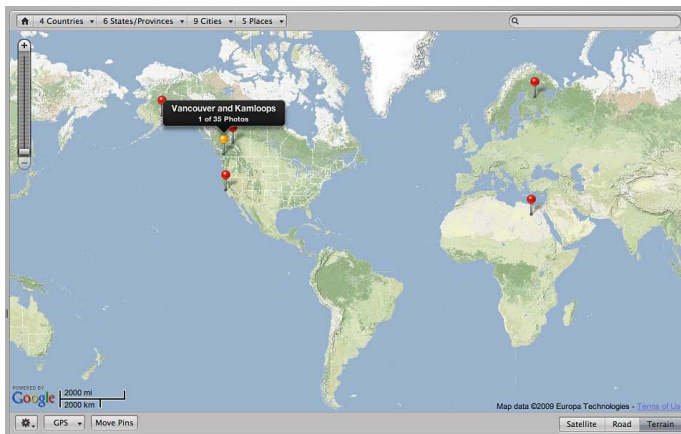
Locating and Organizing Photos with Places

12

An Overview of Places

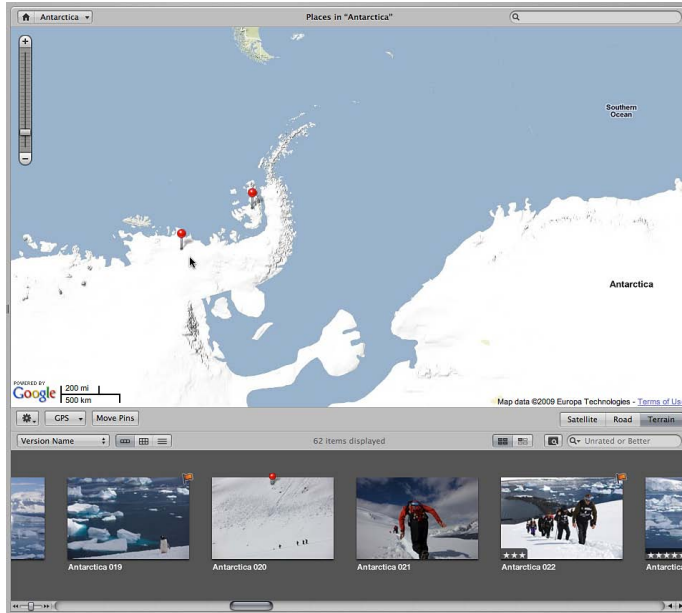
In Aperture, you can organize and explore your photos by location using the Places feature.

If you have a GPS-enabled camera or iOS device, Aperture categorizes your photos by location and converts the GPS location tags to place names such as Vancouver, Canada. Aperture can also convert photo location information from GPS trackers (including those generated by iPhone apps) and from iPhoto photos. You can explore where your photos were shot using Places view.

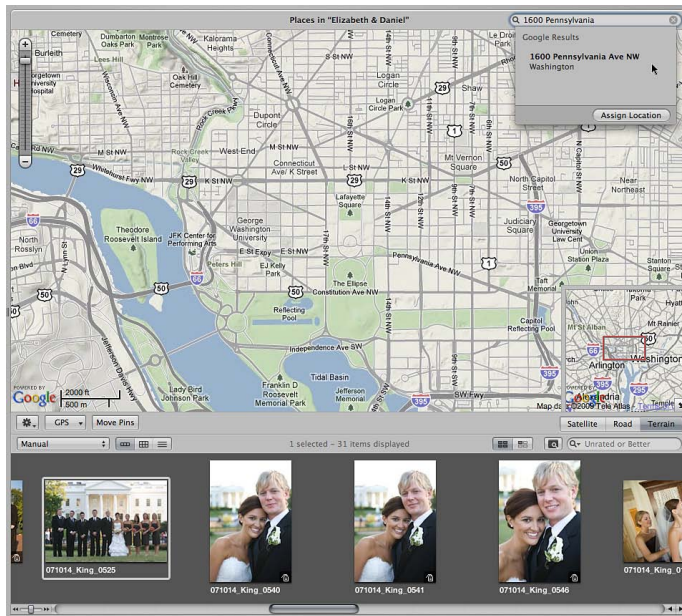


If you don't have a GPS-enabled camera or iOS device, you can still make the most of Places. You can assign locations to your photos by:

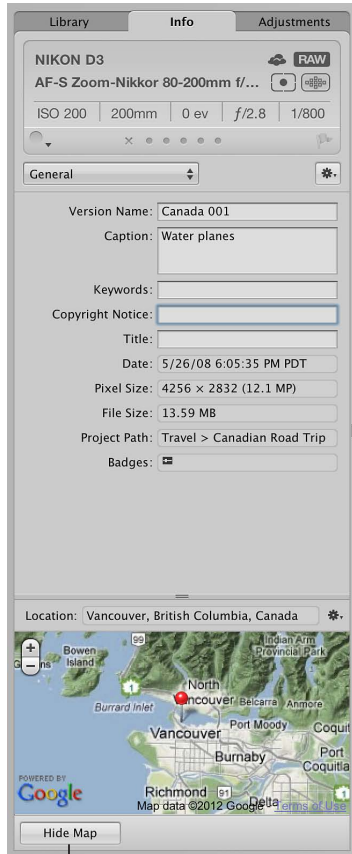
- Dragging photos from the Browser to the appropriate spot on the map in Places view



- Typing the name of a place or entering an address in the Places view search field, and then clicking the Assign Location button



- Entering the name of a place or an address in the Location field in the Map pane of the Info inspector



Show/Hide Map button

Aperture saves every location that has been assigned to a photo. When you want to quickly find photos you shot in New York City or the Grand Canyon, just choose the location from the My Places list in the search field pop-up menu in Places view.

Important: To use Places, you must be connected to the Internet.

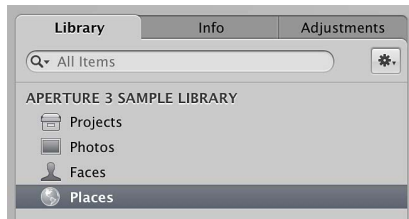
Viewing Photo Locations

If you shot your photos with a GPS-enabled camera or iOS device, Aperture automatically plots the location of each photo on the map in Places view. There are many ways to view a photo's location and the photos associated with a location using Places view.

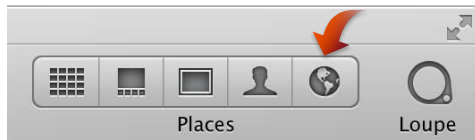
To view the location information for a photo or group of photos

1 Do one of the following:

- To view the photo locations for photos throughout the library: In the Library inspector, select Places.



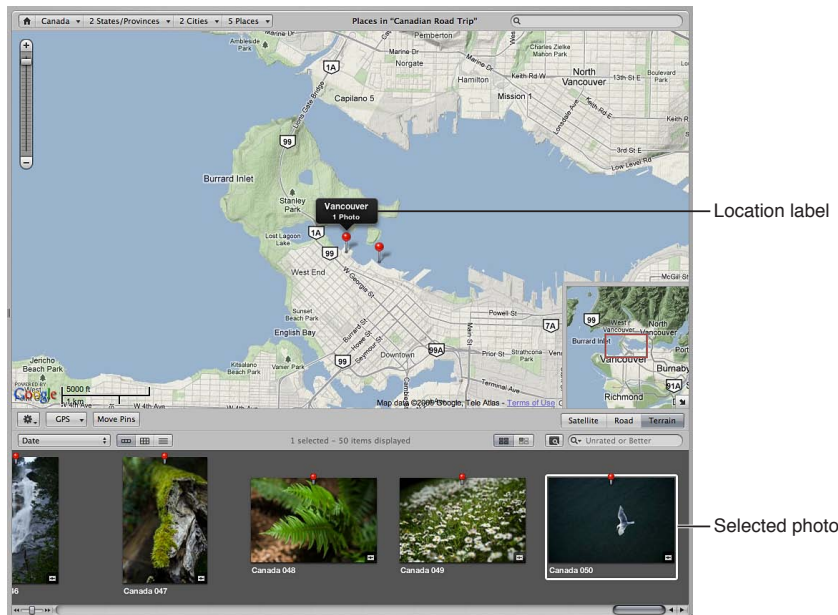
- To view the photo locations for photos in an item selected in the Library inspector: Select an item in the Library inspector containing photos that already have location information assigned to them, then click the Places button in the toolbar.



The Aperture main window switches to Places view. Red location pins mark the locations where photos or groups of photos were shot.

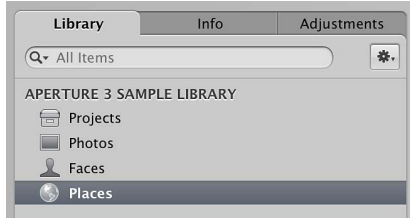
2 In the Browser, select a photo.

A location label appears above a pin in Places view, indicating the location where the photo was shot. The location label indicates the name of the location and the number of photos that were captured there.

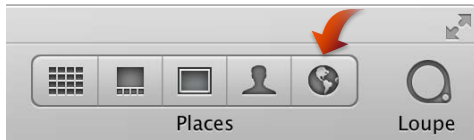


To view the photos associated with a location

- 1 Do one of the following:
 - In the Library inspector, select Places.



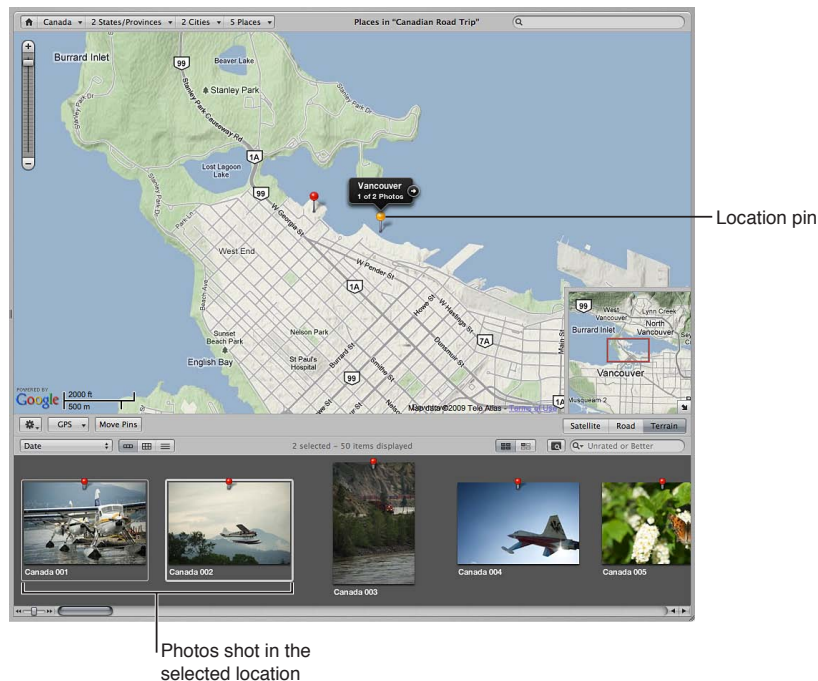
- Select an item in the Library inspector containing photos that already have location information assigned to them, then click the Places button in the toolbar.



The Aperture main window switches to Places view. Red location pins mark the locations where photos or groups of photos were shot.

- 2 Select a red pin.

The selected pin turns orange, and the photo or photos associated with the location marked by the orange pin are selected in the Browser.

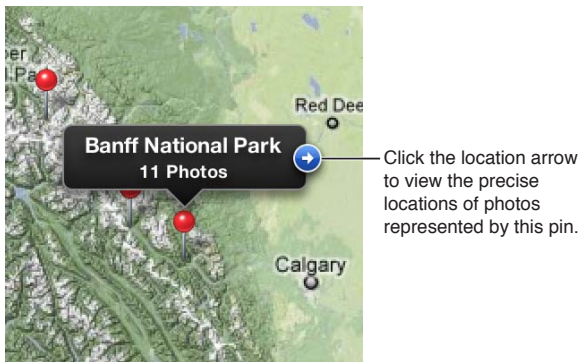


To view the precise location of photos represented by the same location pin

Depending on the zoom setting in Places view, Aperture might use a single pin to represent a group of photos shot in close proximity. However, you can view the precise location where each photo in the group was shot.

Do one of the following:

- In Places view, click the location arrow on the location label.



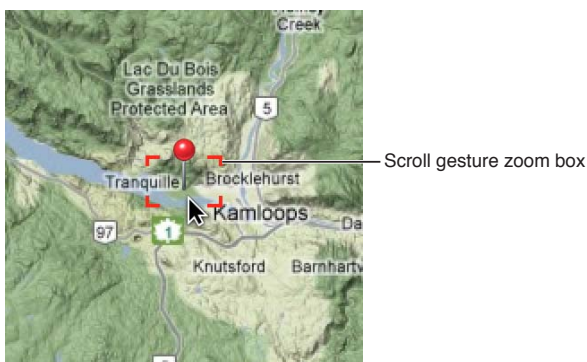
Places view zooms in to the location of the photo group, marking the location of each photo with a pin. Some photos may remain grouped together in a single location pin if shot in close proximity. Click the location arrow on the location label to zoom in further.

- In Places view, use the Zoom slider and buttons to zoom in to the location of the photo group.



As you zoom in to the map, locations grouped together in a single pin begin to be marked by their own pins.

- Use the scroll gesture to zoom in and out.



As you zoom in to the map, locations grouped together in a single pin begin to be marked by their own pins.

- Command-drag a specific area of the map.

The map zooms in to the area indicated by the selection rectangle.



To reposition the map in Places view

As you zoom in to the map, you may need to reposition it.

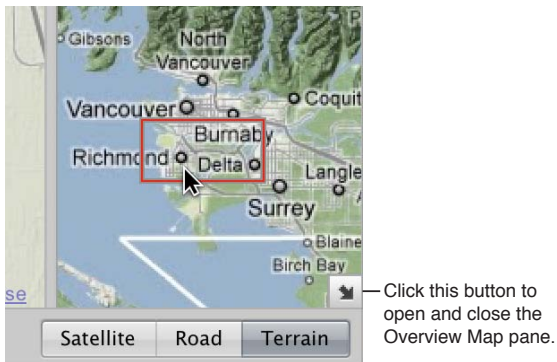
Do one of the following:

- Move the map by dragging it.
- Drag the box in the Overview Map pane, which appears in the bottom-right corner of Places view.



To open and close the Overview Map pane

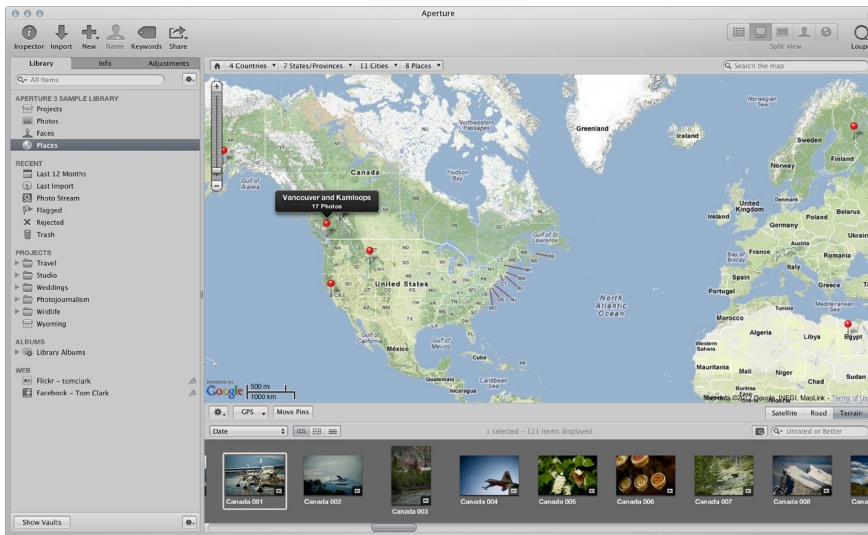
- Click the Overview Map Pane button.



To view all photos in the Aperture library that have location assignments

- 1 In the Library inspector, select Places.

Places view appears, with red pins representing photos that have location assignments.



- 2 Zoom in to a specific location by doing one of the following:

- Choose a location from one of the Places Path Navigator pop-up menus at the top of Places view.



Aperture repositions the map to display the selected location.

- In Places view, use the Zoom slider and buttons to zoom in to the location of a photo group.



As you zoom in to the map, photo locations grouped together in a single pin begin to be marked by their own pins.

- Position the pointer over a pin that represents the location of a group of photos, then use the scroll gesture to zoom in to the map.

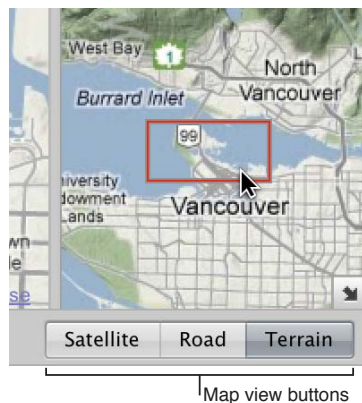


As you zoom in to the map, photo locations grouped together in a single pin begin to be marked by their own pins. As you zoom out of the map, photo locations marked by individual pins are consolidated into fewer pins as they get closer together.

Changing the Map View

There are three different map views you can use within Places view:

- *Satellite view*: This view shows the map as satellite imagery.
- *Road view*: This view shows the map with a traditional depiction of roads, parks, borders, bodies of water, and more.
- *Terrain view*: This view displays a topographical map with physical elevations as shaded relief along with elevation lines.



To switch to the Satellite view within Places view

- Click the Satellite button.

Select the Show Labels checkbox, which appears when the Satellite button is clicked, to view street names and other information.

To switch to the Road view within Places view

- Click the Road button.

To switch to the Terrain view within Places view

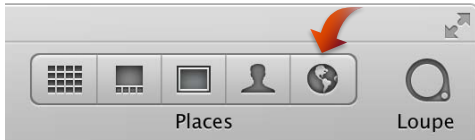
- Click the Terrain button.

Adding Locations to Photos

You don't need a GPS-enabled camera or iOS device to use Places. Adding location information in Places view is as simple as dragging photos from the Browser to the area on the Places view map where they were shot. Another option is to enter a specific location in the search field in Places view, select a location from the Google Results list that appears below the search field, and then click the Assign Location button. You can also designate a large geographical area, such as a city or national park, as a location and assign this general location to photos.

To manually assign locations to photos in the Browser

- 1 Select an item in the Library inspector containing photos to which you want to assign location information.
- 2 Click the Places button in the toolbar.

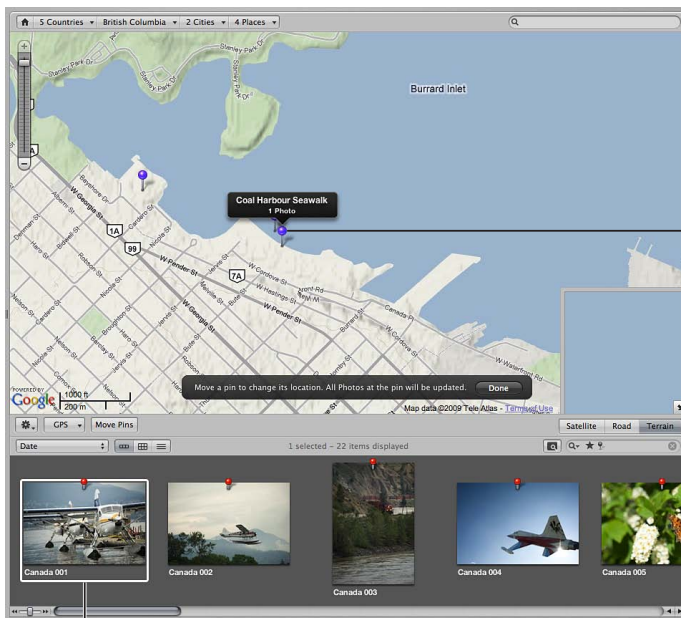


The Aperture main window switches to Places view. Red pins mark the locations where photos that already have location information were shot.

- 3 Position the map in Places view to display the location you want to assign to the photos by dragging and zooming in to the map.
- 4 In the Browser, select a photo or group of photos, then drag the photo selection to the appropriate location on the map in Places view.

A purple pin with a location label appears, marking the location where the photo or photo group was shot. The location label indicates the name of the location and the number of photos that were captured there.

A dialog also appears at the bottom of Places view, informing you that you can move the pin to change the location assigned to all photos associated with the pin.

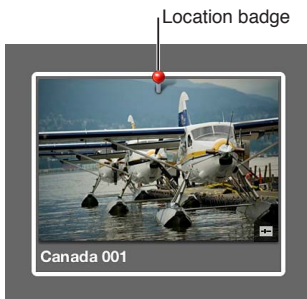


A purple pin with a location label marks the location where the photo selection was shot.

Selected photo

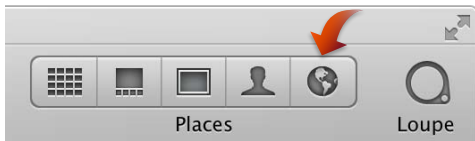
5 Click Done.

The purple pin turns red, indicating that the location you specified has been assigned to the selected photos, and a location badge (a red pin) appears over the thumbnail images in the Browser.



To search for a location and assign it to a photo selection

- 1 Select an item in the Library inspector containing photos to which you want to assign location information.
- 2 If the main window is not in Places view, click the Places button in the toolbar.



The Aperture main window switches to Places view. Red pins mark the locations where photos that already have location information were shot.

- 3 In the Browser, select the photos to which you want to assign a location.
- 4 Choose Metadata > Assign Location.
- 5 In the dialog that appears, enter the location you want to search for in the search field. For example, you can enter a city name or an address.

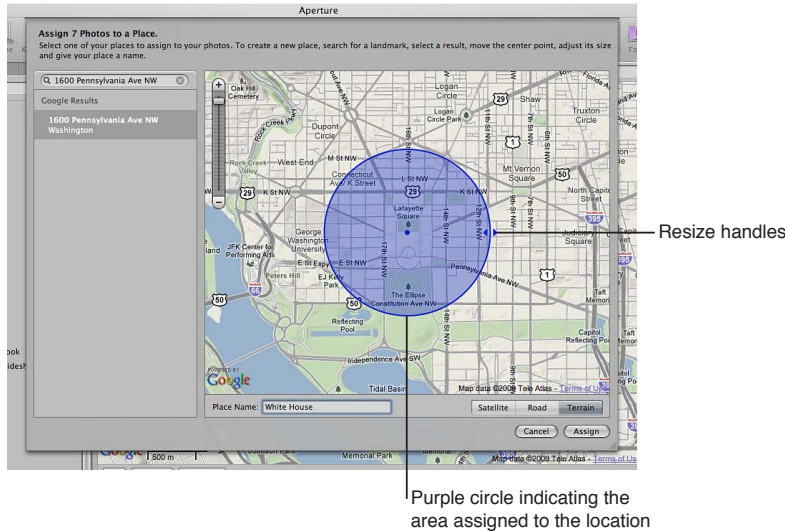
Locations whose names match the text you entered are listed below the search field.

- 6 Select the appropriate location in the search results list.

A location is plotted on the map with a purple circle surrounding it. The purple circle is used to determine the geographical area encompassed by the location.

- 7 If you wish, enter a custom name for the location, such as "Our backyard," in the Place Name field.

- 8 Drag the resize handles on the right side of the purple circle to change the area assigned to the location.



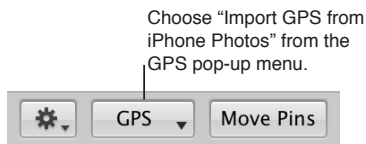
- 9 When you are satisfied with the area assigned to the location, click the Assign button.

A red pin appears on the map in Places view, with a location label indicating the name of the location and the number of photos it's assigned to. A purple circle indicates the area the location covers. A red location badge appears over the selected thumbnail images in the Browser, indicating that a location has been assigned.

To assign location information to photos shot with a GPS-enabled iOS device

If you have photos imported from a GPS-enabled iOS device, you can use the GPS data from the photos to automatically assign location information to them.

- 1 In the Library inspector, select a project containing photos captured with a GPS-enabled iOS device.
- 2 In Places view, choose "Import GPS from iPhone Photos" from the GPS pop-up menu.



- 3 In the dialog that appears, select the photos to which you want to assign location information, then click OK.

Aperture displays waypoints for the photos in Places view.

- 4 In the Browser, drag a photo to a waypoint in Places view to assign location information to it.

Changing Photo Locations

If you've assigned incorrect locations to photos, it's easy to change their location information. There are three methods for reassigning photo locations:

- *To change the location assignment for all photos associated with a location:* You can move the location pin in Places view.
- *To change the location assignment for a subset of photos associated with a location:* You can reassign the location for the photo subset using the Assign Location dialog.
- *To change the location assignment for a single photo:* You can reassign the location for the photo using the Map pane of the Info inspector. For more information, see [Working with Location Information Using the Info Inspector](#) on page 225.

To move a pin, changing the location for all photos with that location assignment

1 Do one of the following:

- In the Library inspector, select Places.
- Select the item in the Library inspector containing the photos whose location you want to change, then click the Places button in the toolbar.

2 In Places view, click the Move Pins button.

The location pins on the Places view map turn purple, indicating that they can be moved.

3 Drag the incorrectly placed pin to the correct location, then click Done in the dialog that appears at the bottom of Places view.

The location pin is moved to its new location, and the location information is changed for all photos associated with the original location.

To change the location assignment for a photo selection

1 In the Browser, select the photos whose location information you want to change.

2 Choose Metadata > Assign Location.

3 In the dialog that appears, enter the new location you want to assign in the search field.

Locations whose names match the text you entered are listed below the search field.

4 Select the appropriate location in the search results list.

A location is plotted on the map with a purple circle surrounding it. The purple circle is used to determine the geographical area encompassed by the location.

5 Adjust the area covered by the location as necessary by dragging the resize handles on the right side of the purple circle.

6 When you are satisfied with the location and the area assigned to it, click the Assign button.

The location assignment for the selected photos changes to the new location. A red pin appears on the map in Places view, with a location label indicating the location name and the number of photos it's assigned to. A purple circle indicates the area the location covers.

Searching for Locations

As you assign locations to the photos in the Aperture library, the list of locations quickly grows. Although you may have shot photos all over the world, you can quickly find the locations where photos were shot using the search field in Places view.

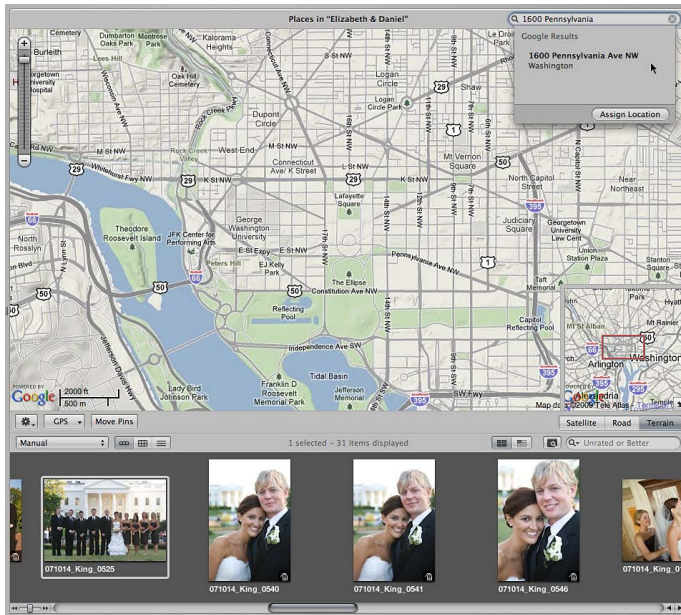
To quickly find locations

- 1 In the Library inspector, select Places.

The Aperture main window switches to Places view.

- 2 Enter the location you want to find in the Places view search field.

Locations you've assigned whose names match the text entered in the search field appear at the top of the search results list. Additional results located by Google appear in the Google Results section at the bottom of the list.



- 3 Select the correct location in the list that appears below the search field.

The location pin for the location you selected appears in Places view.

Note: You can also remove location information from photos using the Map pane of the Info inspector. For more information, see [Working with Location Information Using the Info Inspector](#) on page 225.

Removing Locations

If you have assigned a location to a photo or group of photos by mistake, you can remove it.

To remove location information from a photo or group of photos

- 1 Do one of the following:
 - *To remove a location assignment from all photos associated with a location:* In Places view, select the location pin.
 - *To remove a location assignment from a subset of photos associated with a location:* In the Browser, select the photos whose location information you want to remove.
- 2 In Places view, choose Remove Locations from the Places Action pop-up menu (with a gear icon).

If you selected a location pin, the location is removed from all photos associated with the pin. If you selected photos in the Browser, the location information is removed from the selected photos.

You can also remove location information from photos using the Map pane of the Info inspector. For more information, see [Working with Location Information Using the Info Inspector](#) on page 225.

Importing and Working with GPS Track File Data

To begin working with a GPS track file in Places view, you must first import the GPS track file into Aperture.

GPS track points are digital bread crumbs that are used to define a path or route (“track”) using precise coordinates saved by a GPS device or GPS tracking iPhone app. If you have a GPS-enabled camera or iOS device or another GPS device that you use to create track files and save waypoints, you can import the track files into Aperture and work with them in Places view. Each leg and waypoint is displayed in Places view, and you can assign the legs and waypoints to photos. Photos taken with a GPS-enabled camera or iOS device are automatically assigned locations corresponding to waypoints in the track file.

To import a GPS track file

- 1 In the Library inspector, select the project into which you want to import the track file, then click the Places button in the toolbar.
- 2 In Places view, choose Import GPS Track from the GPS pop-up menu.
- 3 In the dialog that appears, navigate to the location of the GPS track file, select it, then click Choose Track File.

The track file is imported into the selected project. The track file appears as a purple line on the map in Places view.

To create a new location based on a waypoint in a GPS track file

Once you have imported the GPS track file into your Aperture project, you can begin working with the GPS track data to create new locations, assign locations to photos, and move location pins.

- 1 In the Library inspector, select a project with an imported GPS track file.
- 2 In the Browser, select a photo and drag it to a waypoint in Places view.

A small dialog appears at the bottom of Places view asking if you would like to assign location information to other photos in the project based on time.

3 Do one of the following:

- *To assign photo location information to other photos in the project based on time in the GPS track file:* Click Assign Locations.
- *If you don't want to assign photo location information to other photos in the project:* Click Done.

To assign location information from a GPS waypoint to a photo selection

- 1 In the Browser, select the photo or photos to which you want to assign location information.
- 2 In Places view, Control-click the waypoint whose location information you want to assign to the selected photos, then choose Assign Photos from the shortcut menu.

The waypoint's location information is assigned to the photo selection, and a location badge (a red pin) appears at the top of each selected photo in the Browser.

Moving location pins that correspond to waypoints in a GPS track file works the same way as moving other location pins. For more information about moving location pins, see [Changing Photo Locations](#) on page 220.

To delete a GPS track file

You can delete a GPS track file at any time. For example, if you have several GPS track files on your computer and you aren't sure which locations they track, you can import the files individually to see if the track data corresponds to locations in your project. If a GPS track file contains track data that doesn't match locations in your project, you can delete it.

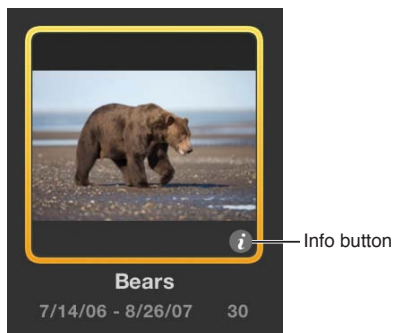
- In Places view, choose Delete Selected Track from the GPS pop-up menu.

Assigning Location Information to Projects

If all the photos in a project were shot in the same location, you can save time by assigning location information to the project in Projects view. Rather than selecting photos in the Browser and assigning them a location, you can assign the location to the project. Assigning a location to a project assigns the location to all versions in the project.

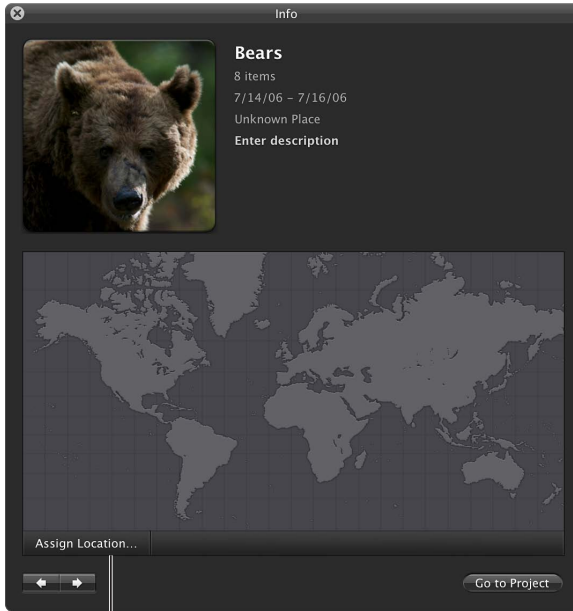
To quickly assign a location to all versions in a project

- 1 In the Library inspector, select Projects.
The Aperture main window switches to Projects view.
- 2 Click the Info button for the project to which you want to assign the location.



The Info HUD appears.

- 3 In the Info HUD, click Assign Location.

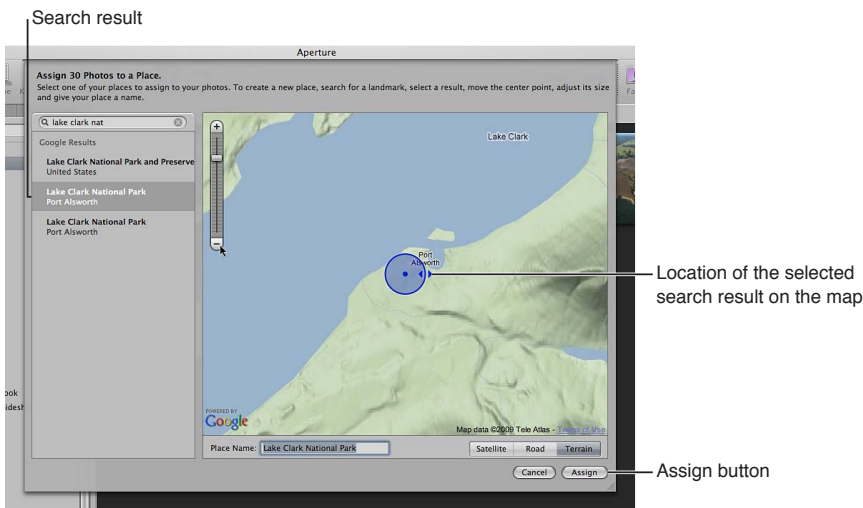


Assign Location button

- 4 In the dialog that appears, enter a specific address or the name of a place, a city or town, or a significant geographical location such as a national park in the search field.

Google searches for the location you entered in the search field and displays a list of search results. Place names that match the text you entered are displayed at the top of the search results list, and Google search matches are displayed under Google Results.

- 5 Select the search result that matches the location you are looking for.



Location of the selected search result on the map

Assign button

- 6 If you would like to give the location a custom name, enter a name in the Place Name field.
- 7 Click Assign.

The selected location is assigned to every photo in the project.

Working with Location Information Using the Info Inspector

In addition to working with location information in Places view and Projects view, you can also work with location information in the Map pane of the Info inspector. The Map pane of the Info inspector provides a convenient means of modifying a photo's location information without having to switch to Places view.

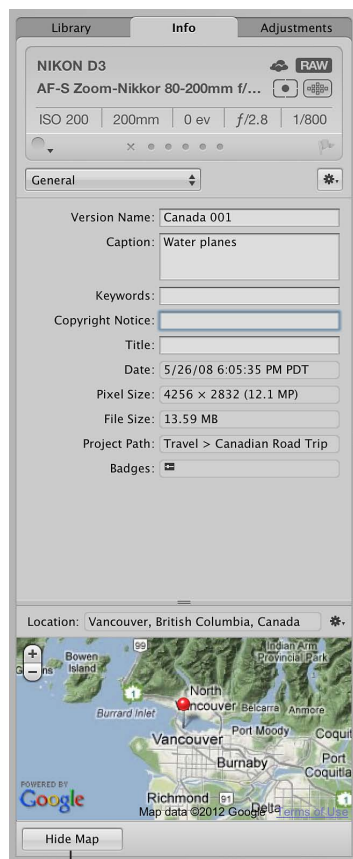
There are four map views you can use within the Map pane of the Info inspector:

- *Satellite*: This view shows the map as satellite imagery.
- *Satellite with Labels*: This view shows the map as satellite imagery with street names and other information.
- *Road view*: This view shows the map with a traditional depiction of roads, parks, borders, bodies of water, and more.
- *Terrain view*: This view displays a topographical map with physical elevations as shaded relief along with elevation lines.

To view a photo's location information using the Map pane of the Info inspector

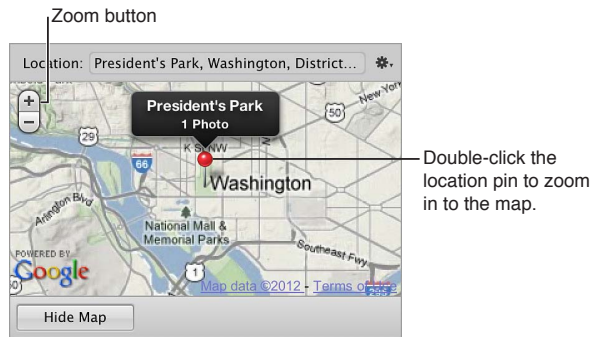
- 1 In the Browser, select a photo whose location information you want to view.
- 2 In the Info inspector, click the Show Map button.

The Map pane appears, with a red pin in the center of the map indicating where the photo was shot.



Show/Hide Map button

The controls for zooming in to and out of the map are similar to the zoom controls in Places view.



To zoom in to and out of the map in the Map pane of the Info inspector

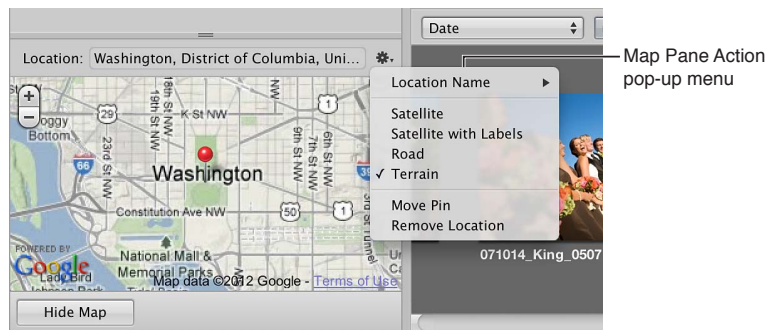
Do one of the following:

- In the Map pane of the Info inspector, use the Zoom buttons to zoom in to or out of the location where the photo was captured.
- Use the scroll gesture to zoom in and out.
- In the Map pane of the Info inspector, double-click the location pin.

The map zooms in to the area where the photo was captured. Double-click the location pin again to zoom in further.

To switch views within the Map pane of the Info inspector

- Choose a map view from the Map Pane Action pop-up menu.



To assign location information using the Map pane of the Info inspector

- 1 In the Browser, select a photo to which you want to assign a location.
- 2 In the Info inspector, click the Show Map button to open the Map pane.



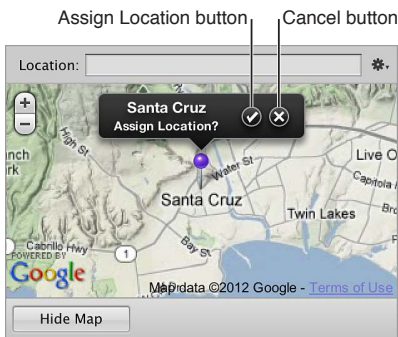
The Map pane appears.

- 3 Enter the name of the location you want to assign to the photo in the Location field, then select the location in the search results list that appears.



The map view changes to show the new location, with a purple location pin and a location label at its center.

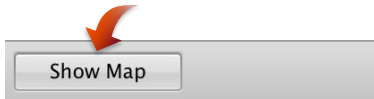
- 4 Click the Assign Location button in the location label.



The location information is assigned to the photo.

To change a photo's location information using the Map pane of the Info inspector

- 1 In the Browser, select a photo whose location information you want to change.
- 2 In the Info inspector, click the Show Map button to open the Map pane.



The Map pane appears, with a red pin in the center of the map indicating where the photo was shot.

- 3 Choose Move Pin from the Map Pane Action pop-up menu.



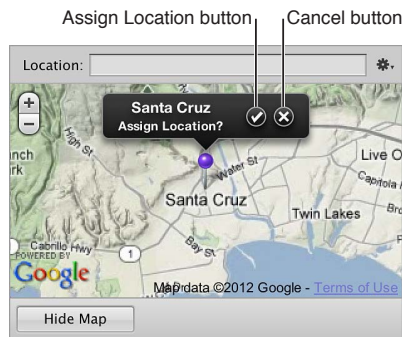
The red pin turns purple.

- 4 Enter the name of a new location to assign to the photo in the Location field, then select the location in the search results list that appears.



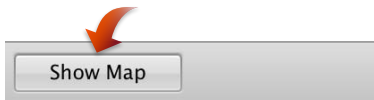
The map view changes to show the new location.

- 5 Do one of the following:
 - *To assign the location to the photo:* Click the Assign Location button in the location label.
 - *To cancel the location change:* Click the Cancel button in the location label.



To remove location information using the Map pane of the Info inspector

- 1 In the Browser, select a photo whose location information you want to remove.
- 2 In the Info inspector, click the Show Map button to open the Map pane.



The Map pane appears.

- 3 Choose Remove Location from the Map Pane Action pop-up menu.



The location information is removed from the photo.

Searching for and Displaying Photos

13

An Overview of Searching

Aperture allows you to easily search for and gather photos in a variety of locations. In Aperture, you can search for photos in multiple ways. You can use the search field and pop-up menu in the Browser to quickly locate photos by name or display photos by rating, flag status, and color label. You can also use the Filter HUD to perform complex searches for photos using a wide variety of criteria, including photo name, subject, keyword, photographer, caption or text, date, location, EXIF and IPTC information, applied adjustments, color labels, flagged photos, usage statistics, and more.

In addition to searching for photos in the Browser, you can search for photos within items in the Library inspector. You can quickly locate faces using the search field in Faces view. You can also quickly find locations assigned to photos using the search field in Places view.

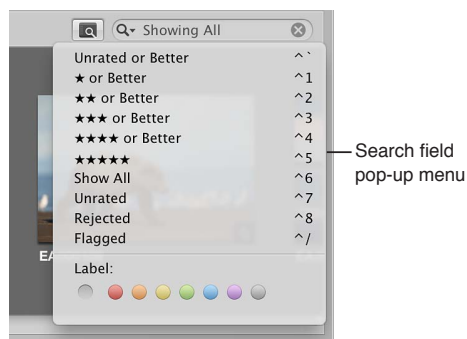
For more information about searching for items in the Library inspector, see [An Overview of the Library Inspector](#) on page 31.

For more information about searching for items in Faces view, see [Searching by Face](#) on page 245.

For more information about searching for items in Places view, see [Searching by Place](#) on page 251.

Performing Quick Searches Using the Search Field Pop-Up Menu

The search field pop-up menu in the Browser provides a set of options that let you quickly remove photos from view in the Browser so that you can focus on the photos with which you want to work. You can either enter the name of a photo in the search field or choose a rating, flag status, or color label from the search field pop-up menu to filter photos in the Browser. Although photos that don't match your search string or search field pop-up menu choice are removed from view, they are not deleted. To view all photos in the Browser again, you simply click the Reset button in the search field.



To show photos based on a text string or numerical value, such as a keyword or pixel size

- In the Browser, enter the search string in the search field, then press Return.

To show only photos that have been assigned a specific rating or better

Do one of the following:

- In the Browser, choose Unrated or Better from the search field pop-up menu to show photos that are unrated or better, or press Control–Grave Accent (`).

Note: This is the default view.

- In the Browser, choose One Star or Better from the search field pop-up menu to show photos that are rated one star or better (or press Control-1).
- In the Browser, choose Two Stars or Better from the search field pop-up menu to show photos that are rated two stars or better (or press Control-2).
- In the Browser, choose Three Stars or Better from the search field pop-up menu to show photos that are rated three stars or better (or press Control-3).
- In the Browser, choose Four Stars or Better from the search field pop-up menu to show photos that are rated four stars or better (or press Control-4).
- In the Browser, choose Five Stars from the search field pop-up menu to show photos that are rated five stars, also known as *selects* (or press Control-5).

To show all photos regardless of rating, including rejects

- In the Browser, choose Show All from the search field pop-up menu (or press Control-6).

To show unrated photos only

- In the Browser, choose Unrated from the search field pop-up menu (or press Control-7).

To show rejected photos only

- In the Browser, choose Rejected from the search field pop-up menu (or press Control-8).

To show flagged photos only

- In the Browser, choose Flagged from the search field pop-up menu, or press Control-Slash (/).

To show photos based on the color labels assigned to them

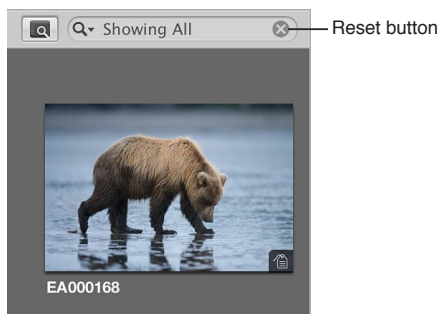
Do one of the following:

- In the Browser, choose No Label from the search field pop-up menu to show only photos that have no color label assigned to them (or press Command-Control-0).
- In the Browser, choose Red from the search field pop-up menu to show only photos that have the red color label assigned to them (or press Command-Control-1).
- In the Browser, choose Orange from the search field pop-up menu to show only photos that have the orange color label assigned to them (or press Command-Control-2).
- In the Browser, choose Yellow from the search field pop-up menu to show only photos that have the yellow color label assigned to them (or press Command-Control-3).
- In the Browser, choose Green from the search field pop-up menu to show only photos that have the green color label assigned to them (or press Command-Control-4).
- In the Browser, choose Blue from the search field pop-up menu to show only photos that have the blue color label assigned to them (or press Command-Control-5).
- In the Browser, choose Purple from the search field pop-up menu to show only photos that have the purple color label assigned to them (or press Command-Control-6).

- In the Browser, choose Gray from the search field pop-up menu to show only photos that have the gray color label assigned to them (or press Command-Control-7).

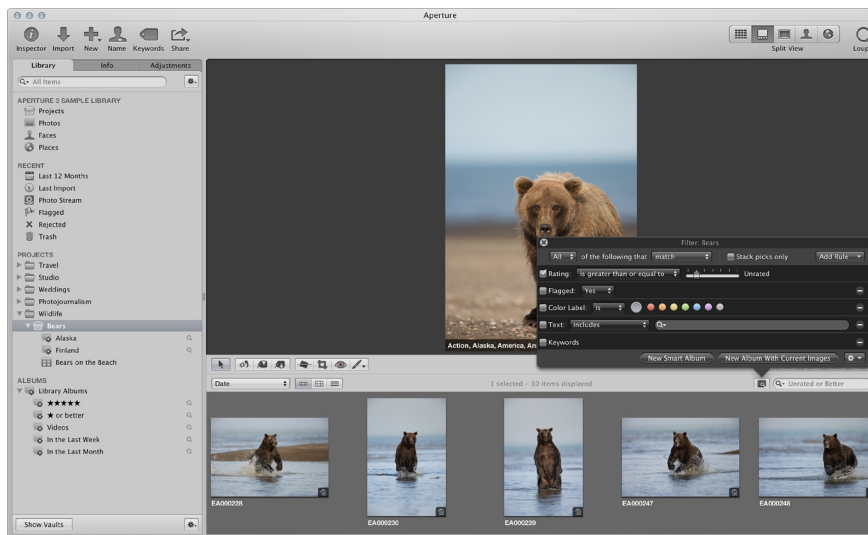
To reset the search field pop-up menu back to the default setting of Unrated or Better

- Click the Reset button on the right side of the search field.



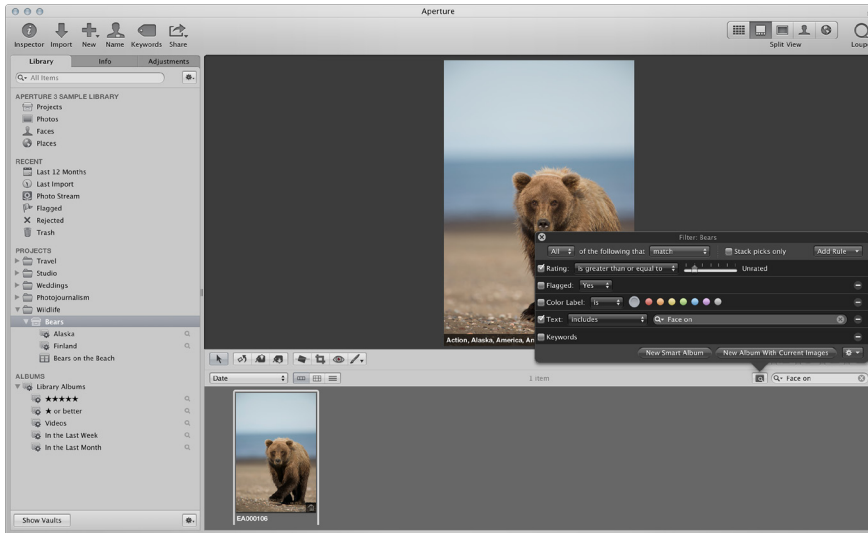
About the Filter HUD

The Filter HUD is an easy-to-use window with options for specifying search criteria. For example, you can enter the text “action” in the Filter HUD, and Aperture locates files that include that text in their metadata. To show the Filter HUD for a selected project, you click the Filter HUD button (with a magnifying glass icon) next to the search field in the Browser.



You can use the Filter HUD to display particular photos within a project, album, or folder, which are automatically gathered based on search criteria. You specify where you want to search by selecting the project, album, or folder that contains the photos you want to see.

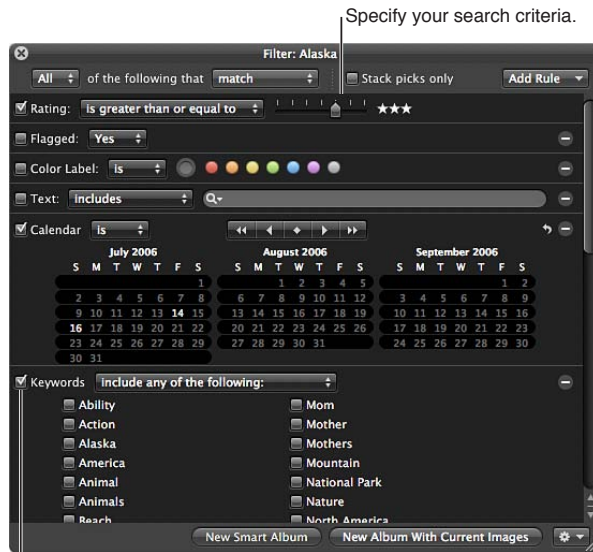
The most common reason to perform a search is to display a selection of photos within a project. By selecting a project and using the Filter HUD, you can quickly display specific photos, hiding the rest from view. For example, you might isolate and display only those photos of a certain subject, pose, rating, or location. Your search doesn't change the contents of the project; it only temporarily changes the photos you view in the Browser. If you cancel the search criteria in the Filter HUD, all of your photos appear in the Browser again. The Filter HUD is preset to show photos that are unrated or better, hiding rejected photos, but you can change the Filter HUD criteria to show rejected photos if you wish.



You can also create special albums, called *Smart Albums*, whose contents are gathered automatically, solely by search criteria. For example, you might create a Smart Album that searches for and displays all portrait photos from the entire library. When you create a Smart Album, you use the Smart Settings HUD—whose controls are similar to the controls in the Filter HUD—to define criteria for the photos that should appear in the Smart Album. In this case, you can set the Smart Album to locate and capture photos with the keyword *Portrait* assigned to them. As you add portrait photos to your library over time, they automatically appear in the Smart Album you created to track them. For more information about creating and using Smart Albums, see [An Overview of Smart Albums](#) on page 255.

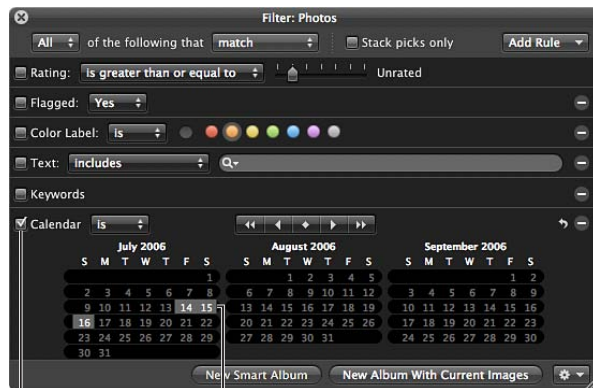
Aperture can locate photos based on many types of information associated with the photos. When you import photos into Aperture, certain information is automatically assigned to each photo, including EXIF metadata such as image date, photographer, camera technical data, filename, and much more. You can also assign your own metadata to photos, including keywords, summaries, captions, and information used by IPTC fields, and then locate your photos by searching for the metadata. In addition, you can search for photos based on the type of adjustment applied to them as well as the version of the RAW decoding process used to decode the RAW original.

The search criteria that you use can be simple or complex. The following illustration shows some of the search criteria you can specify using the Filter HUD.



Select the checkboxes for the items you want to search by.

To search using a particular type of search criteria, you select the checkbox to turn on the search option and then specify the criteria that Aperture should look for. For example, to find photos taken on a specific date, you select the Calendar checkbox and select a date or range of dates.



Select the Calendar checkbox.

Select the dates you want to search by.

The photos taken on the dates you specified are displayed in the Browser, where you can review and work with them.

The following search options are available in the Filter HUD and Smart Settings HUD.

Rule	Function
Adjustments	Search for photos based on the type of adjustment that has been applied to them in Aperture, as well as which RAW decoding version was used to render the image.
Aperture Metadata	Search for photos with Aperture-specific metadata applied to them, such as version name and project name.
Attachment	Search for photos based on whether they have audio attachments.
Calendar	Search for photos by the date they were taken as registered in the EXIF data.
Color Label	Search for photos that have color labels assigned to them.
Date	Search for photos based on their creation date.
EXIF	Search for photos using any EXIF information recorded by the camera.
Face	Search for photos based on the faces that have been assigned names.
File Status	Search for photos based on whether they are managed images, referenced images, or online or offline images.
File Type	Search for files of a specific type, such as RAW or video.
Flagged	Search for photos that you have flagged in Aperture.
Import Session	Search for photos that were imported at a specific time or on a specific date.
IPTC	Search for photos based on any IPTC information assigned to them.
Keywords	Search for photos by any of the keywords that you've assigned to them.
Photo Usage	Search for photos that have been employed for a specific purpose in Aperture, such as photos currently used in a book, emailed photos, and prints ordered via the Apple print service.
Place	Search for photos by the location information assigned to them.
Rating	Search for photos based on the ratings assigned to them in Aperture.
Text	Search for photos based on any text associated with a photo.

To show the Filter HUD

Do one of the following:

- Choose Edit > Find (or press Command-F).
- Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser.

To show the Smart Settings HUD

- In the Library inspector, click the Smart Settings HUD button to the right of the Smart Album whose search criteria you want to modify.

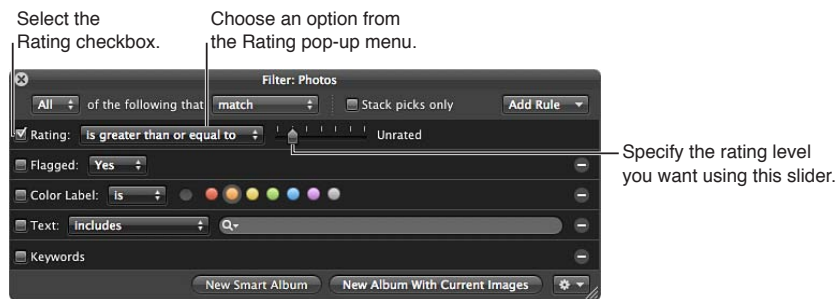
For more information about working with Smart Albums, see [An Overview of Smart Albums](#) on page 255.

Searching by Rating

You can use the Filter HUD to see all photos with a certain rating. For example, you can search for all the photos in a project that have a rating of five stars. You can show photos with a specific rating, photos rated at or below a specific rating, or photos rated at or above a rating. Aperture is preset to hide photos rated as rejected, showing only those that are unrated or better.

To search for photos by rating

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, select the Rating checkbox.



- 4 From the Rating pop-up menu, choose whether you want to search for photos with a rating that is equal to, greater than or equal to, or less than or equal to the specified rating.
- 5 Specify the rating level by dragging the slider.

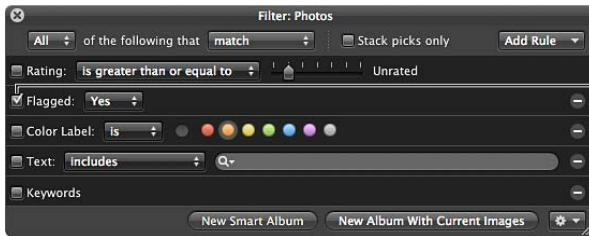
The photos that match the search criteria are displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching for Flagged Photos

You can use the Filter HUD to locate photos that you have flagged in Aperture. You can also locate photos that have not been flagged.

To search for flagged photos

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, select the Flagged checkbox.



Select the Flagged checkbox.

- 4 Choose an option from the Flagged pop-up menu:
 - To locate flagged photos: Choose Yes.
 - To located photos without flags: Choose No.
- 5 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it's not already chosen.

The photos that match the search criteria are displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

To quickly review all flagged photos in the library

- In the Recent section of the Library inspector, click Flagged.

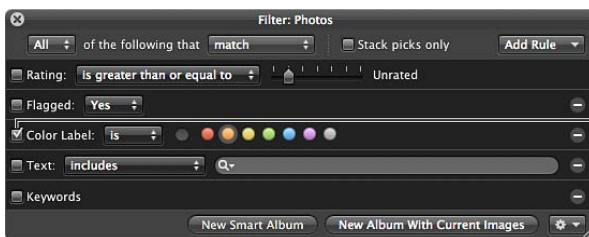
All flagged photos in the library appear in the Browser.

Searching by Color Label

You can search for and locate photos that have color labels assigned to them. To search for photos with a specific color label, you use the Color Label search options. You can search for more than one color label at a time. You can also search for photos that do not have a specific color label assigned to them.

To search for photos by color label

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, select the Color Label checkbox.



Select the Color Label checkbox.

- 4 Choose an option from the Color Label pop-up menu:
 - *To display photos that have the specified color labels assigned to them:* Choose “is.”
 - *To display photos that do not have the specified color labels assigned to them:* Choose “is not.”
- 5 Select the colors you want to search by.
You can select more than one color at a time to broaden your search.
- 6 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it’s not already chosen.

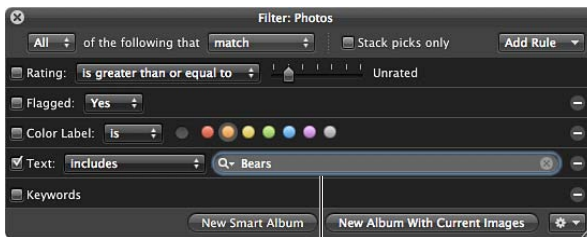
The photos that match the search criteria are immediately displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by Photo Name, Caption, or Other Text

You can search for photos using any text that you’ve associated with a photo. For example, you might search for photos based on text in a photo’s caption or keywords, or in any other text entry. You can also search by multiple text entries.

To search for photos by text

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 Select the Text checkbox, then enter the text you want to search for in the search field.



Enter the text you want to search for in this field.

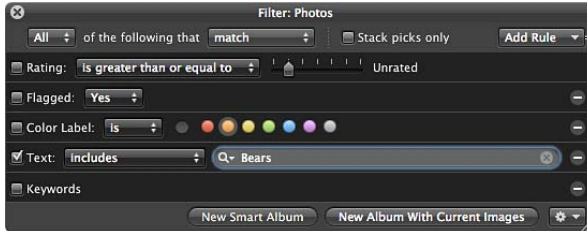
You can enter multiple text items, separated by commas. Aperture locates any photos that have a match for all the text items.

- 4 Choose an option from the Text pop-up menu to qualify your search.
 - *To specify characters that the text associated with the photo should contain somewhere within the field:* Choose “includes.”
 - *To specify characters that the text associated with the photo should not contain:* Choose “does not include.”
 - *To specify the exact characters that the text associated with the photo should contain:* Choose “is.”
 - *To specify the exact characters that the text associated with the photo should not contain:* Choose “is not.”
 - *To specify the characters that the text associated with the photo should begin with:* Choose “starts with.”
 - *To specify the characters that the text associated with the photo should end with:* Choose “ends with.”
- 5 Choose All from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it’s not already chosen.

The photos that match the search criteria are displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

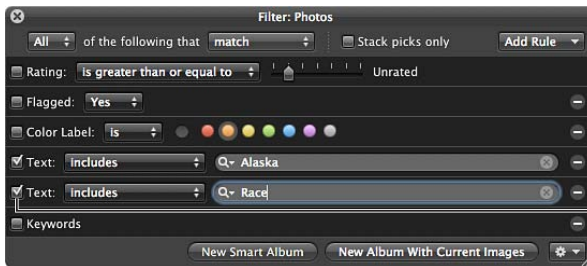
To search for photos by multiple text entries

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, add as many text fields as you need by choosing Text from the Add Rule pop-up menu multiple times.



Choose Text from the Add Rule pop-up menu.

- 4 Select the Text checkboxes and enter text in each field to locate the photos you want.



Select the Text checkboxes and enter text in each text field you added.

- 5 Choose an option from the Text pop-up menu to qualify your search.
 - To specify characters that the text associated with the photo should contain somewhere within the field: Choose "includes."
 - To specify characters that the text associated with the photo should not contain: Choose "does not include."
 - To specify the exact characters that the text associated with the photo should contain: Choose "is."
 - To specify the exact characters that the text associated with the photo should not contain: Choose "is not."
 - To specify the characters that the text associated with the photo should begin with: Choose "starts with."
 - To specify the characters that the text associated with the photo should end with: Choose "ends with."
- 6 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD to locate photos that have matches for any of the text entries, or choose All to locate photos that have matches for all of the text entries.

The photos that match the search criteria are immediately displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

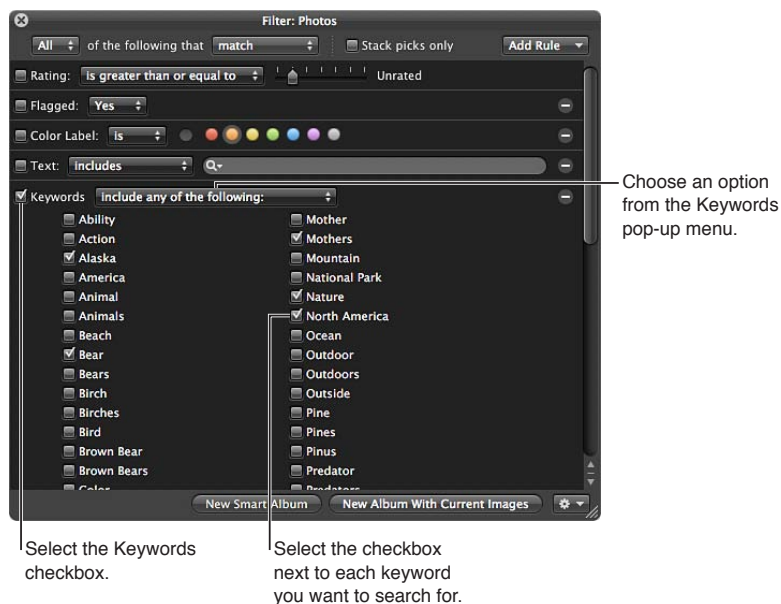
Searching by Keyword

You can search for and locate photos by any of the keywords that you've assigned to them. You can select one or more keywords to search for. You can also specify which keywords a photo must have to qualify as a match. For example, you can choose to search for photos that have both *Silhouette* and *Landscape* as keywords, or photos that have either *Silhouette* or *Landscape* as keywords. In addition, you can search for photos that do not have specific keywords applied to them.

To search for photos by keyword

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, select the Keywords checkbox.

Note: The Keywords checkbox is dimmed if no keywords have been applied to the photos in the selected item in the Library inspector.



- 4 Choose an option from the Keywords pop-up menu:
 - *To display photos that have the selected keywords:* Choose “are applied.”
 - *To display photos that do not have the selected keywords:* Choose “are not applied.”
 - *To display photos that have any of the selected keywords:* Choose “include any of the following.”
 - *To display only those photos that have all the keywords you selected:* Choose “include all of the following.”
 - *To display photos that have only the selected keywords:* Choose “include only the following.”
 - *To display photos that do not have any of the selected keywords:* Choose “do not include any of the following.”
 - *To display photos that do not have all of the selected keywords:* Choose “do not include all of the following.”
- 5 Select the checkboxes next to the keywords you want to search for.
- 6 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it's not already chosen.

You can also search for IPTC keywords using the IPTC search options. These options allow you to specify searches for specific IPTC fields in a variety of ways. For example, you can search for any photos that don't have keywords assigned. For more information, see [Searching by IPTC Information](#) on page 249.

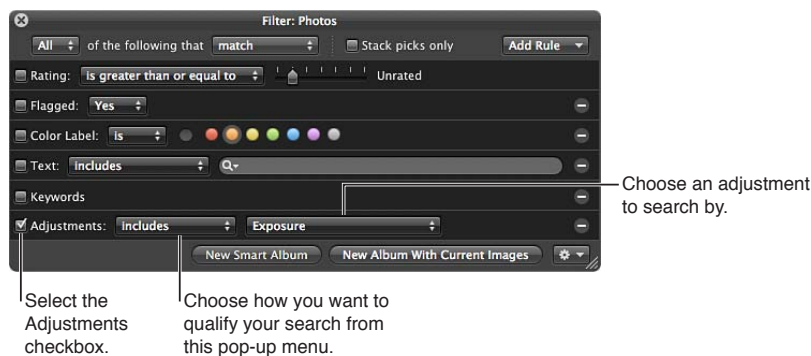
The photos that match the search criteria are immediately displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by Adjustments

You can search for and identify photos based on the type of adjustment that has been applied to them, as well as which RAW decoding version was used to render the image. To search for photos based on a specific adjustment, you use the Adjustments search options. You can also search for photos that do not have a specific type of adjustment applied to them.

To search for photos by adjustment type

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose Adjustments from the Add Rule pop-up menu, and select the Adjustments checkbox.



- 4 Choose an option from the Adjustments pop-up menu:
 - *To display any photo that has had an adjustment applied to it:* Choose "are applied."
 - *To display photos with no adjustments:* Choose "are not applied."
 - *To display photos with a specific adjustment applied to them:* Choose "includes," then choose an adjustment from the pop-up menu to the right.
 - *To display photos that do not have a specific adjustment applied to them:* Choose "do not include," then choose an adjustment from the pop-up menu to the right.
- 5 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it's not already chosen.

The photos that match the search criteria are displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

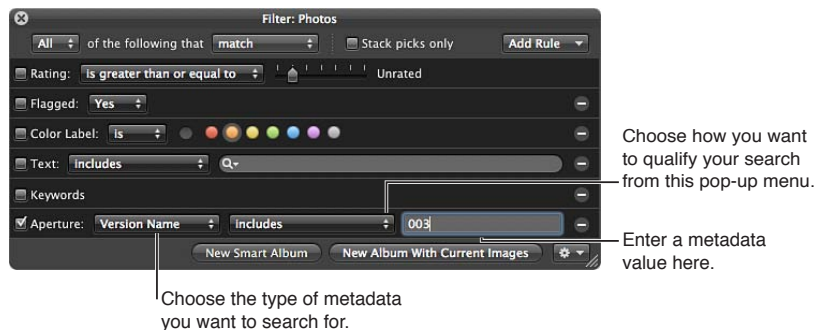
Searching by Aperture Metadata

To search for photos by metadata other than IPTC or EXIF information, you use the Aperture Metadata search options. You can search for photos using the following kinds of metadata tracked by Aperture:

- Album name
- Aspect ratio
- Project name
- Project path
- Filename
- File size
- Original pixel size
- Orientation
- Pixel size
- Version name

To search for photos by metadata other than IPTC or EXIF information

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose Aperture Metadata from the Add Rule pop-up menu.
- 4 Select the Aperture checkbox, then choose the type of metadata you want to search for using the Aperture pop-up menu.



- 5 Choose an option from the middle pop-up menu to qualify your search.
- 6 Enter the metadata value, such as "Antarctica" or "Sierra Slideshow," in the Aperture metadata text field.
- 7 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it's not already chosen.

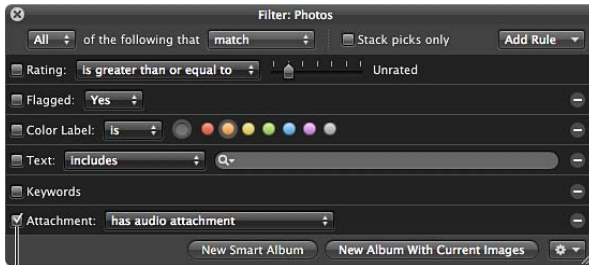
The photos that match the search criteria are displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by Attachment

Using the Filter HUD, you can search for photos that have audio attachments and photos that do not have audio attachments.

To search for photos with attachments

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose Attachment from the Add Rule pop-up menu, then select the Attachment checkbox.



Select the Attachment checkbox.

- 4 Do one of the following:
 - *To search for photos with attachments:* Choose “has audio attachment” from the Attachment pop-up menu.
 - *To search for photos with no attachments:* Choose “does not have audio attachment” from the Attachment pop-up menu.
- 5 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it’s not already chosen.

The photos that match the search criteria are displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by Calendar

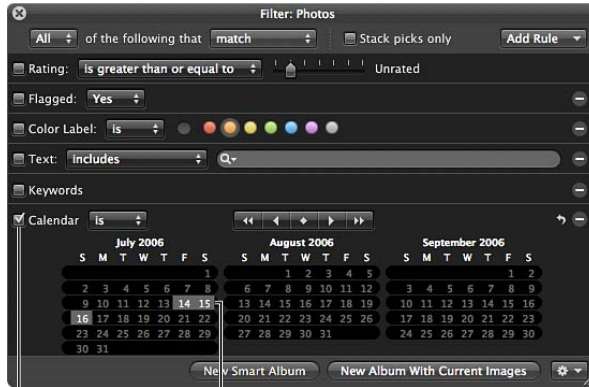
You can search for and locate photos by the date they were taken. For example, you might locate any photos taken during a trip between May 16, 2011 and May 20, 2011. To search for photos by date, you use the Calendar search options. When the calendar appears, any dates that appear in bold represent dates on which new photos were taken as registered in the EXIF data. You can select a date or several dates in the calendar to search for photos taken on those dates, as well as specify a range of dates. In addition, you can search for photos taken outside of a range of dates.

Note: Images that you import from sources other than digital cameras and card readers, such as JPEG or TIFF files, may not have EXIF information associated with them. However, you can search for them based on each file’s creation date. For more information, see [Searching by Date](#) on page 243.

To search for photos by date

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).

- In the Filter HUD, choose Calendar from the Add Rule pop-up menu, then select the Calendar checkbox.



Select the Calendar checkbox.

Select the dates you want to search by.

- Choose an option from the Calendar pop-up menu:
 - To display photos shot on the selected dates: Choose “is.”
 - To display photos not shot on the selected dates: Choose “is not empty and is not.”
- Select the date or dates you want to search by.

Use the Calendar navigation buttons to navigate through the monthly calendars. Shift-click to select a range of continuous dates; Command-click to select multiple noncontinuous dates.

- Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it’s not already chosen.

The photos that match the search criteria are immediately displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

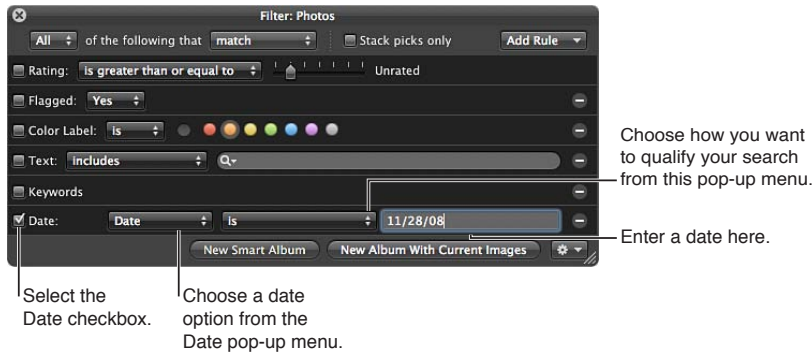
Searching by Date

Images that you import from sources other than digital cameras and card readers, such as JPEG or TIFF files, may not have EXIF information associated with them. However, they typically have a creation date assigned to the file. You can use this creation date to locate images using the Date search options.

To search for images by creation date

- In the Library inspector, select the item you want to search.
- Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- In the Filter HUD, choose Date from the Add Rule pop-up menu.
- Select the Date checkbox, then choose a date option from the Date pop-up menu.
- Choose an option from the middle pop-up menu to qualify your search.

- 6 In the text field, enter the date you want the search based upon.



If needed, you can add multiple Date options to specify the capture year, capture month, capture day, and so on.

- 7 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it's not already chosen.

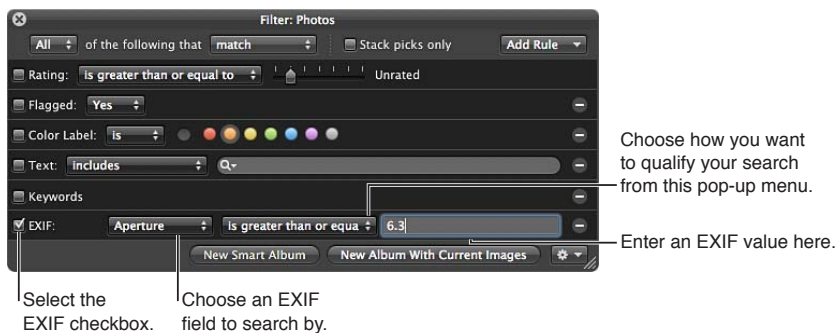
The photos that match the search criteria are immediately displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by EXIF Information

You can search for and locate photos using any EXIF information recorded by your camera. For example, you might locate any photos that were created with a certain camera or at a specific exposure. To search for photos by EXIF information, you use the EXIF search options.

To search for photos by EXIF information

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose EXIF from the Add Rule pop-up menu.
- 4 Select the EXIF checkbox, then choose an EXIF field you want to search by from the EXIF pop-up menu.



- 5 Choose an option from the middle pop-up menu to qualify your search.

- 6 Enter the EXIF value you want to search by in the EXIF text field.
- 7 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it's not already chosen.

The photos that match the search criteria are immediately displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

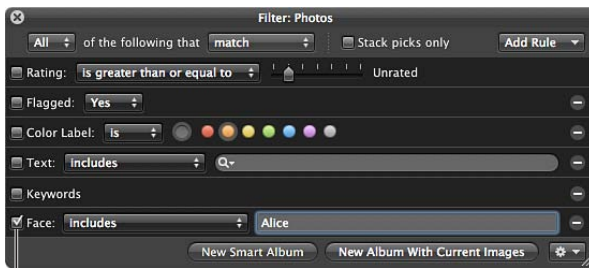
Searching by Face

You can search for and locate photos based on the faces that have been assigned names. You can search for photos that only contain a single named face, as well as photos that have multiple people in them, including the face you're looking for.

For more information about working with Faces, see [An Overview of Faces](#) on page 199.

To search for photos by Faces information

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose Face from the Add Rule pop-up menu.
- 4 Select the Face checkbox, then choose an option from the Face pop-up menu:



Select the Face checkbox.

- To display photos that include a face: Choose "includes."
 - To display only photos that contain the face: Choose "is."
 - To display only photos that do not contain the face: Choose "is not."
 - To display photos with faces that have not been named: Choose "has unnamed."
 - To display any photo with a face whose name has the following letters: Choose "is detected."
 - To display any photo with a face whose name has none of the following letters: Choose "is not detected."
 - To display any photo with a face whose name begins with the following letters: Choose "starts with."
 - To display any photo with a face whose name ends with the following letters: Choose "ends with."
- 5 Enter the face name you want to search by in the Face text field.
 - 6 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it's not already chosen.

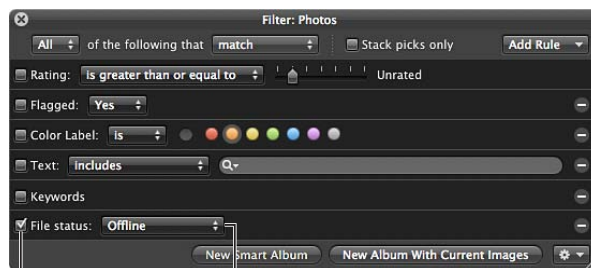
The photos that match the search criteria are immediately displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by File Status

You can search for photos based on whether they are managed images, referenced images, or online or offline images. In addition, you can use the File Status search category to show the photos whose originals Aperture considers missing. For more information about locating and reconnecting missing image files, see [Reconnecting Missing or Offline Referenced Images](#) on page 102.

To search for photos by file status

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose File Status from the Add Rule pop-up menu, then select the “File status” checkbox.
- 4 Deselect any checkboxes that aren’t part of your query, then choose the search criteria from the “File status” pop-up menu.



Select the “File status” checkbox.

Choose the file status you want to search for.

- To display photos whose originals are located in the Aperture library: Choose Managed.
 - To display photos whose originals are located outside of the Aperture library: Choose Referenced.
 - To display photos whose originals are visible to Aperture: Choose Online.
 - To display photos whose originals are not visible to Aperture because the external disk drive they reside on is not connected to your computer: Choose Offline.
 - To display photos that Aperture cannot locate: Choose Missing.
- 5 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it’s not already chosen.

The photos that match the search criteria are displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by File Type

You use the File Type search options in the Filter HUD to locate images of a specific file type. You can also search for RAW + JPEG image pairs, movie and audio file attachments, and images edited with external applications.

To search for files by type

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose File Type from the Add Rule pop-up menu, then select the File Type checkbox.



Select the File Type checkbox.

- 4 Choose an option from the File Type pop-up menu:
 - *To display files of a specific file type:* Choose “is,” then choose a file type from the pop-up menu to the right.
 - *To display files that are not of a specific file type:* Choose “is not,” then choose a file type from the pop-up menu to the right.
- 5 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it’s not already chosen.

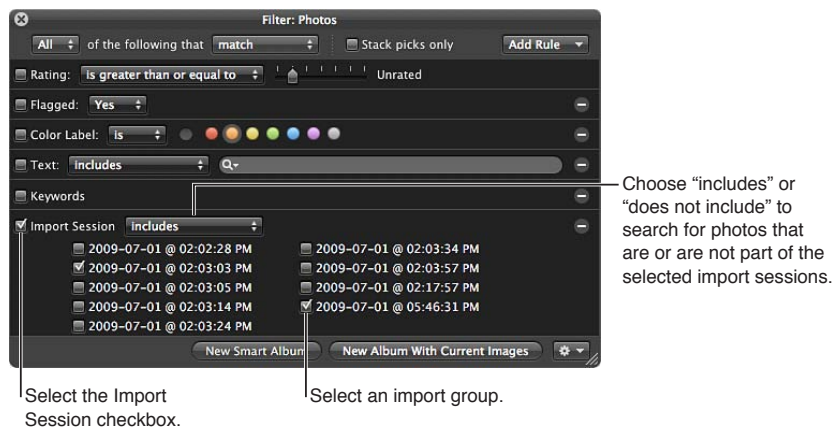
The photos that match the search criteria are displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by Import Session

You can locate photos that were imported at a specific time or on a specific date. Aperture keeps track of your import sessions and can identify photos that were imported at the same time. To search for photos based on their import session, you use the Import Session search options. You can also search for photos that were not imported during a specific import session or range of sessions.

To search for photos by import session

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose Import Session from the Add Rule pop-up menu, then select the Import Session checkbox.



- 4 Select the checkbox for the import group you want to search by.
- 5 Choose an option from the Import Session pop-up menu:
 - *To display photos imported during the selected import sessions:* Choose "includes."
 - *To display photos not imported during the selected import sessions:* Choose "does not include."
- 6 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it's not already chosen.

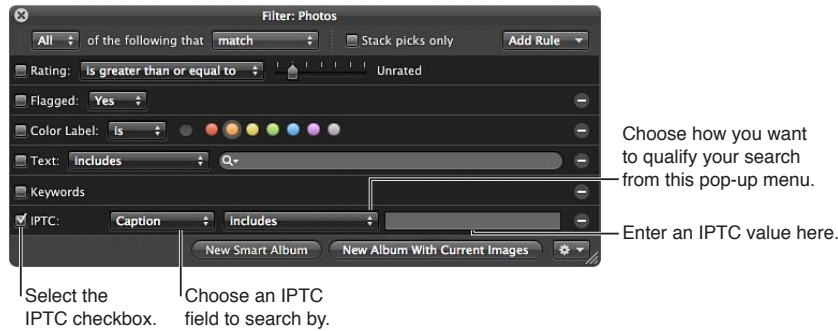
The photos that match the search criteria are displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by IPTC Information

You can search for and locate photos using any IPTC information that you've assigned to your photos. To search for photos by IPTC information, you use the IPTC search options. For example, you can search for any photo that doesn't have a copyright notice applied to it by specifying a search that uses the Copyright Notice field and an "is empty" search qualifier.

To search for photos by IPTC information

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose IPTC from the Add Rule pop-up menu.
- 4 Select the IPTC checkbox, then choose the IPTC field you want to search by from the IPTC pop-up menu.



- 5 Choose an option from the middle pop-up menu to qualify your search.
 - To specify characters that the IPTC field should contain somewhere within the field: Choose "includes."
 - To specify characters that the IPTC field should not contain: Choose "is not empty and does not include."
 - To specify the exact characters that the IPTC field should contain: Choose "is."
 - To specify the exact characters that the IPTC field should not contain: Choose "is not empty and is not."
 - To specify the characters that the IPTC field should begin with: Choose "starts with."
 - To specify the characters that the IPTC field should end with: Choose "ends with."
 - To specify that the IPTC field should hold no entry: Choose "is empty."
 - To specify that the IPTC field can be any entry as long as the field is not empty: Choose "is not empty."
- 6 Enter the IPTC value you want to search by in the IPTC text field.
- 7 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it's not already chosen.

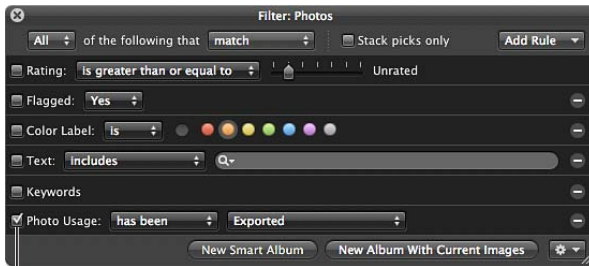
The photos that match the search criteria are immediately displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by Photo Usage

You use the Photo Usage search options in the Filter HUD to locate photos that have been employed for a specific purpose. You can search for photos that are currently used in a book, photos currently placed in a Light Table arrangement, emailed photos, exported photos, prints or books ordered via the Apple print service, locally printed photos, photos that have been viewed, and photos used in an album, a book album, a Light Table album, or a web gallery album.

To search for photos by usage information

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose Photo Usage from the Add Rule pop-up menu.
- 4 Select the Photo Usage checkbox, then choose an option from the Photo Usage pop-up menu.



Select the Photo Usage checkbox.

- To specify that Aperture display photos that have been used in the chosen operation: Choose “has been.”
 - To specify that Aperture display photos that have not been used in the chosen operation: Choose “has not been.”
- 5 Choose an operation option from the rightmost pop-up menu to qualify your search.
 - 6 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it’s not already chosen.

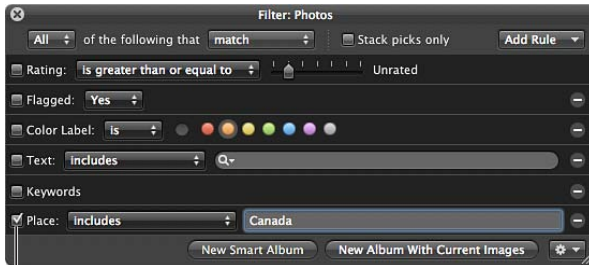
The photos that match the search criteria are immediately displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by Place

If you have photos that were shot with a GPS-enabled digital camera or if you've identified where photos were shot using Places, you can search for photos by location using the Place search options in the Filter HUD.

To search for photos by location

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose Place from the Add Rule pop-up menu, then select the Place checkbox.



Select the Place checkbox.

- 4 Choose an option from the Place pop-up menu to qualify your search.
 - To specify characters that the place name should contain somewhere within the field: Choose "includes."
 - To specify characters that the place name should not contain: Choose "does not include."
 - To specify the exact characters that the place name should contain: Choose "is."
 - To specify the exact characters that the place name should not contain: Choose "is not."
 - To specify the characters that the place name should begin with: Choose "starts with."
 - To specify the characters that the place name should end with: Choose "ends with."
 - To specify that the place name should hold no entry: Choose "is empty."
 - To specify that the place name can be any entry as long as the field is not empty: Choose "is not empty."
- 5 Enter the value you want to search by in the Place text field.
- 6 Choose Any from the Any/All pop-up menu in the top-left corner of the Filter HUD, if it's not already chosen.

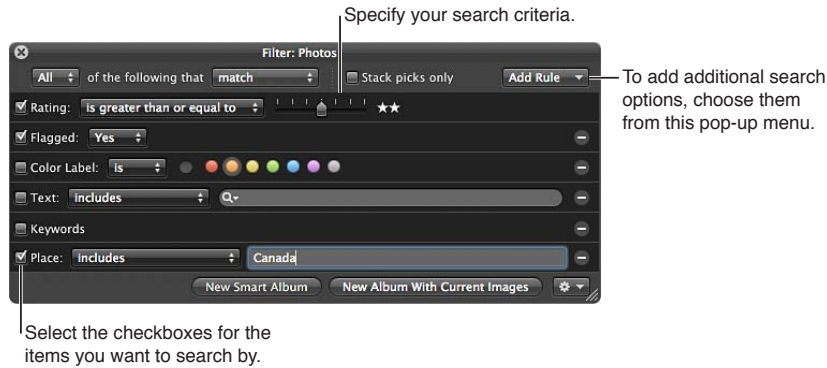
The photos that match the search criteria are displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching by a Combination of Criteria

You can specify complex combinations of search criteria in the Filter HUD. For example, you can search for photos that have certain keywords and that were taken on a specific date. To create complex searches, you add multiple search options using the Add Rule pop-up menu.

To search for photos by a combination of search criteria

- 1 In the Library inspector, select the item you want to search.
- 2 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 3 In the Filter HUD, choose the search options you want to add from the Add Rule pop-up menu.
- 4 Select the checkboxes beside the criteria you want to use, and specify the search criteria.



- 5 Do one of the following:
 - To specify that a photo must match at least one of the criteria or keywords: Choose Any from the Any/All pop-up menu and “match” from the Match pop-up menu.
 - To specify that a photo must match all the criteria and keywords: Choose All from the Any/All pop-up menu and “match” from the Match pop-up menu.
 - To specify that a photo must not match any of the criteria and keywords: Choose Any from the Any/All pop-up menu and “do not match” from the Match pop-up menu.
 - To specify that a photo must not match all of the criteria and keywords: Choose All from the Any/All pop-up menu and “do not match” from the Match pop-up menu.

The photos that match the search criteria are immediately displayed in the Browser. To save your search results, see [Saving Your Search Results](#) on page 253.

Searching Across the Entire Library

At times, you may want to search for photos that reside in many different projects. For example, you might want to locate all your select photos for an entire year or for a particular month. To search for photos across the library, you use Photos view. Photos view displays all the photos in your library regardless of which project, folder, or album they reside in.

To search for photos across the entire library

- 1 In the Library inspector, select Photos.

The main window switches to Photos view, displaying all of the photos in the Aperture library. In Photos view, you can use the Browser and Viewer to locate, sort, and adjust photos as necessary.

- 2 Make sure the Browser is showing by doing one of the following:
 - *To show the Browser by itself:* Choose View > Browser.
 - *To show the Browser and Viewer together:* Choose View > Split View.
- 3 Click the Filter HUD button (with a magnifying glass icon) beside the search field in the Browser (or press Command-F).
- 4 In the Filter HUD, choose the search options you want to add from the Add Rule pop-up menu.
- 5 Select the checkboxes beside the criteria you want to use, then specify the search criteria.

The photos in the library that match the search criteria set in the Filter HUD appear in the Browser.

Saving Your Search Results

When you perform a search using the Filter HUD, you can save your results in several ways. You can create a new Smart Album that locates photos that match the search criteria. You can also save the search results themselves in a new album, book album, Light Table album, slideshow album, Flickr album, Facebook album, Smart Web Page Album, webpage album, or web journal album.

To create a Smart Album based on the search criteria

- 1 Use the Filter HUD to search for photos based on specified criteria.
- 2 In the Filter HUD, click the New Smart Album button.

A new, untitled Smart Album appears in the Library inspector.

- 3 Enter a name for the Smart Album, then press Return.

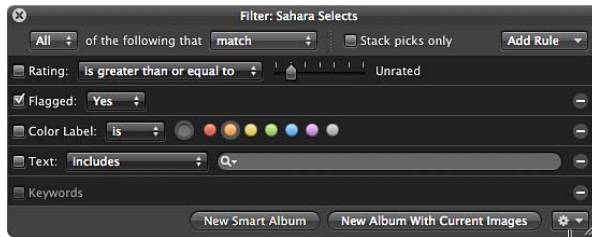
When you add photos to a project or the library that match the search criteria, they are automatically added to the Smart Album.

For more information, see [An Overview of Smart Albums](#) on page 255.

To save your search results in an album

- 1 Use the Filter HUD to search for photos based on specified criteria.
- 2 In the Filter HUD, do one of the following:
 - *To create a new album:* Click the New Album With Current Images button, enter a name for the album that appears in the Library inspector, then press Return.

- To create a new book album, Light Table album, slideshow album, Flickr album, Facebook album, Smart Web Page Album, webpage album, or web journal album: Choose the appropriate item from the Filter HUD Action pop-up menu (with a gear icon), enter a name for the album, then press Return.



Filter HUD Action
pop-up menu

All photos that match the search criteria are placed in the new album you created.

Grouping Photos with Smart Albums

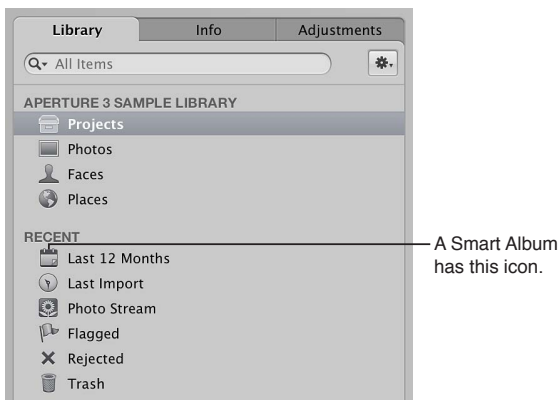
14

An Overview of Smart Albums

When you need to group certain types of photos, either temporarily or permanently, you can use a Smart Album to gather the photos. Aperture comes with a number of preset Smart Albums. You can also create your own Smart Album and specify search criteria that identify the photos you want to be included; Aperture automatically searches for and displays the photos in the new album. Whenever a photo meets the search criteria later, it's automatically added to the Smart Album.

Unlike a standard album that you drag photos into, a Smart Album's contents are controlled by the criteria you specify in the Smart Album's Smart Settings HUD. When you change a Smart Album's search criteria, the contents of the Smart Album change.

Aperture comes with a Smart Album set up in the library for you that contains all photos imported into Aperture over the last 12 months. Select a Smart Album to see its contents in the Browser.



You can also create your own Smart Albums. For example, suppose you want to create a Smart Album that includes the best photos you took of a particular sports event. You select the project containing shots of the sports event, create a Smart Album, show the Smart Settings HUD, and search for photos rated Select (five stars). All photos with that rating immediately appear in the Smart Album.

You can also choose where to search for photos—across the entire library or within a specific project or folder. For example, when you select the Projects item in the Library inspector and create a Smart Album, the Smart Album searches across the entire library. When you select a project and create a Smart Album, the Smart Album searches within that project. When you select a folder and create a Smart Album, the Smart Album searches the projects within that folder.

By instituting specific keyword schemes, you can create Smart Albums that are automatically updated with specific kinds of photos.

For example, you might create Smart Albums that:

- Collect photos of certain poses or subjects, such as head shots, photos of particular models, or photos of sports scenes
- Collect photos suitable for a specific purpose, such as distribution on the web or submission to stock photography houses
- Gather the best photos of your collection into a portfolio of poster photos that you use to present or introduce your work
- Automatically gather a project's select photos
- Automatically gather specific types of media, such as audio and video clips

As you complete photography projects throughout the year, Smart Albums are automatically updated with photos that match their search criteria.

You might also use Smart Albums to explore different aspects of your photography portfolio. For example, you can create temporary collections of photos based on technical data such as camera model, exposure, or lens type as you investigate technical influences on your photos.

You can use Smart Albums to track photos on which you've performed specific types of adjustments. For example, you can use the Smart Album's Smart Settings HUD to specify that a Smart Album collect any photo that has had a vignette applied to it.

You can quickly create a Smart Album to review photos and then delete it. Or, you can create Smart Albums that hold permanent and expanding collections of photos. Using Smart Albums can become an efficient way to relieve yourself of slow reviews of photos that you are required to track periodically.

Important: Aperture Smart Albums cannot be edited in iPhoto. To modify the search criteria of an Aperture Smart Album, you must open the Aperture Library in Aperture and then revise the Smart Album's search criteria. For more information, see [Revising the Contents of a Smart Album](#) on page 259.

Collecting Photos in a New Smart Album

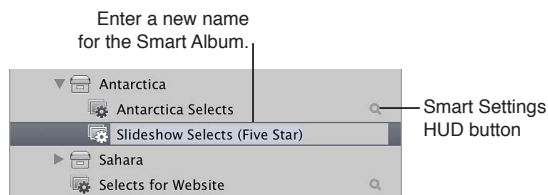
You can collect photos based on any of the information you can search for using the Smart Settings HUD. For example, you can create a Smart Album that gathers photos based on a specific keyword or a combination of keywords, ratings, dates, or other metadata. You can narrow or broaden the Smart Album search criteria in the Smart Settings HUD at any time.

To create a Smart Album that searches only within one project

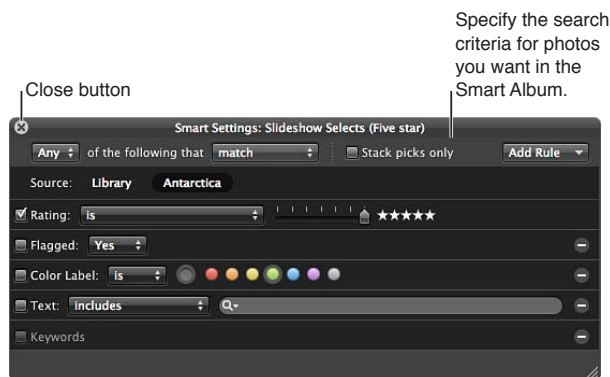
- 1 Select a project in the Library inspector.
- 2 Do one of the following:
 - Choose File > New > Smart Album (or press Command-Shift-L).
 - In the Library inspector, Control-click the project, then choose New > Smart Album from the shortcut menu.
 - Choose Smart Album from the New pop-up menu in the toolbar.

A new, untitled Smart Album appears within the project, and the Smart Settings HUD appears to its right.

- 3 Rename the Smart Album by entering a new name.



- 4 In the Smart Settings HUD that appears, specify search criteria.



The controls in the Smart Settings HUD are nearly identical to those in the Filter HUD. For more information about using the Filter HUD and specifying search criteria, see [An Overview of Searching](#) on page 229.

- 5 Click the Smart Settings HUD's close button.

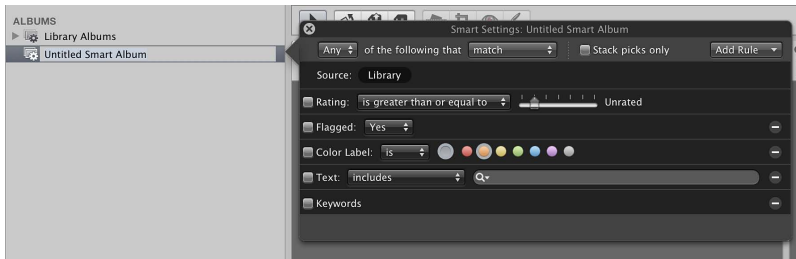
Aperture finds the photos within the project that match the specified search criteria and displays them in the Browser. You can now work with these versions of your photos in the same way you work with photos in any project or album.

To create a Smart Album that searches across the entire library

- 1 In the Library inspector, select Projects.
- 2 Do one of the following:
 - Choose File > New > Smart Album (or press Command-Shift-L).
 - Choose Smart Album from the New pop-up menu in the toolbar.

A new, untitled Smart Album appears in the Albums section of the Library inspector.

- 3 Rename the Smart Album by entering a new name.
- 4 In the Smart Settings HUD, specify search criteria.



For more information about using the Smart Settings HUD and specifying search criteria, see [An Overview of Searching](#) on page 229.

- 5 Click the Smart Settings HUD's close button.

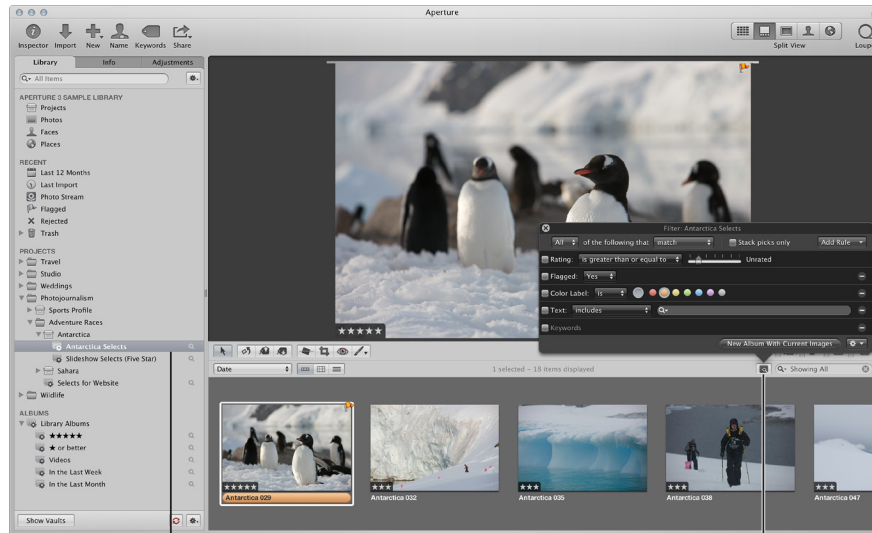
Aperture finds the photos in the library that match the specified search criteria and displays them in the Browser. You can now work with these versions of your photos in the same way you work with photos in any project or album.

Searching Within a Smart Album

After creating a Smart Album, you can search for specific photos within the contents of the Smart Album.

To search within the contents of a Smart Album

- 1 In the Library inspector, select the Smart Album whose contents you want to search, then click the Filter HUD button in the Browser.



Select the Smart Album you want to search within.

Show the Browser's Filter HUD and specify search criteria.

- 2 When the Filter HUD appears, specify secondary search criteria to show specific photos within the Smart Album.

To see the entire contents of the Smart Album again, delete the search criteria in the Filter HUD.

Revising the Contents of a Smart Album

To change the contents of a Smart Album, you change the search criteria for the Smart Album. You can manually select individual photos and delete them, but the deletion removes both the version and the original wherever it exists in the original project. Similarly, you cannot simply drag photos into a Smart Album to add them.

If you decide that certain photos should not be in a Smart Album, you can narrow the search criteria to exclude photos. Aperture performs a new search and revises the Smart Album's contents. To remove a photo from a Smart Album, you can also change the photo so that it no longer matches the Smart Album's search criteria. For example, if a Smart Album gathers photos rated five stars, changing a photo's rating to four stars removes it from the Smart Album.

To change the contents of a Smart Album by changing the search criteria

- 1 In the Library inspector, click the Smart Settings HUD button to the right of the Smart Album to show the Smart Settings HUD.
- 2 Revise the search criteria in the Smart Settings HUD to eliminate or add the photos you want, or change the keyword or rating for the photo itself.
- 3 Click the Smart Settings HUD's close button.

Transferring Smart Album Photos to Another Project or Album

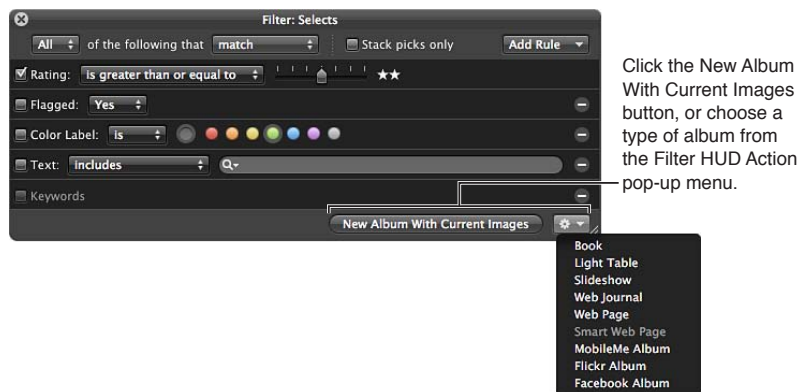
You can transfer photos from a Smart Album to another project or album, such as a slideshow album or a book album. You transfer photos by selecting the photos in the Smart Album and dragging or copying them into another project or album. You can also select the photos in the Smart Album and have Aperture create a new album to hold them.

To transfer photos from a Smart Album to another project or album

- 1 Create a new project or album, if necessary.
- 2 Select the Smart Album, then select the photos you want.
- 3 Drag or copy the photos into the project or album you want to transfer the photos to.

To transfer photos from a Smart Album to a new album that Aperture creates

- 1 In the Library inspector, select the Smart Album containing the photos you want to transfer, then click the Filter HUD button in the Browser.
- 2 In the Filter HUD, specify search criteria for the photos you want to transfer.
- 3 Click the New Album With Current Images button to create an album, or choose the type of album you want from the Filter HUD Action pop-up menu in the bottom-right corner of the Filter HUD.



A new album is created, containing the photos you selected using the search criteria.

Deleting a Smart Album

You can delete a Smart Album at any time, and none of the photos gathered from the library are deleted. If you've transferred photos from a Smart Album to another album, the photos in the other album are also not deleted when you delete the Smart Album.

To delete a Smart Album

- 1 Select the Smart Album in the Library inspector.
- 2 Choose File > Delete Smart Album (or press Command-Delete).

Working with Library Albums

If you created a library in a previous version of Aperture, a selection of Smart Albums was set up in the Library inspector for you automatically. When you click the disclosure triangle beside Library Albums in the Library inspector, you see the following Smart Albums:

- *Five Stars*: Select this Smart Album to see all photos in the library that are rated five stars.
- *One Star or Better*: Select this Smart Album to see all photos that are rated one star or better.
- *Rejected*: Select this Smart Album to see all photos that are rated Reject.
- *Videos*: Select this Smart Album to see all video clips in the library.
- *In the Last Week*: Select this Smart Album to see all photos taken in the last week.
- *In the Last Month*: Select this Smart Album to see all photos taken in the last month.

Important: Library albums appear in the Library inspector only if your Aperture library was created in Aperture 3.2 or earlier.

To work with library albums

- Open an Aperture library created in a previous version of Aperture.

The library albums appear in the Albums section of the Library inspector. For information about switching libraries, see [An Overview of Library Files](#) on page 39.

To remove the library albums from the Library inspector

If you're working with an Aperture library created in a previous version of Aperture and you no longer want to see the library albums, you can remove them.

- In the Library inspector, select Library Albums, then choose File > Delete Folder (or press Command-Delete).

An Overview of Image Adjustments

15

Adjustments in Aperture

Adjustment controls are found in the Adjustments inspector and the Adjustments pane of the Inspector HUD. The controls are the same in each. The Adjustments inspector is a tab in the Inspector pane on the left side of the Aperture main window. The Inspector HUD is a floating version of the inspectors that can be placed anywhere onscreen, allowing you the most flexibility in how you use your screen workspace.

In Aperture, you can apply adjustments to images in two ways. The first method involves using the controls in the Adjustments inspector and the Adjustments pane of the Inspector HUD to identify, or *target*, the pixels that the specific adjustment is designed to fix or enhance, no matter where in the image they occur. The second method involves brushing adjustments on the areas of an image you want to change.

There are two methods you can use to brush adjustments on images in Aperture. Many adjustments can be brushed on images. When you brush an adjustment on an image, you specify the adjustment's parameter settings prior to applying the adjustment. You can also use the Quick Brush adjustments, which are designed to be brushed on the image and then modified using the adjustment controls.

Standard Adjustments

You can make the following standard adjustments to images in Aperture.

Adjustment	Function
Retouch	Retouches all types of imperfections in an image, such as skin blemishes, using either the Repair or Clone brush.
Red Eye Correction	Reduces red-eye in the eyes of the subjects in your images. Used in conjunction with the Red Eye tool.
Spot & Patch	Designed to fix imperfections in an image caused by sensor dust, in previous versions of Aperture. In Aperture 3, it is recommended to use the Retouch adjustment to fix any imperfections in an image.
Straighten	Levels the image's horizon. Used in conjunction with the Straighten tool.
Crop	Trims the image. Used in conjunction with the Crop tool.
Flip	Inverts the composition of the image horizontally, vertically, or both.
Chromatic Aberration	Corrects chromatic aberration, produced by certain lenses during shooting.
Devignette	Corrects a vignette applied to the image when it was shot.

Adjustment	Function
Noise Reduction	Reduces digital noise in an image.
White Balance	Sets an image's white balance by evaluating the image for natural gray or skin tone in identified faces, as well as by adjusting the color temperature and tint.
Exposure	Adjusts exposure, recovery, black point, and brightness.
Enhance	Adjusts contrast, definition, saturation, and vibrancy, as well as black, gray, and white tints.
Curves	Selectively remaps the tonal range of the image by applying a curve from input to output.
Highlights & Shadows	Selectively adjusts the exposure in the shadows and highlights of an image.
Levels	Selectively adjusts the tonal range of an image.
Color	Adjusts hue, saturation, and luminance on a color-by-color basis, as well as chromatic range.
Black & White	Selectively controls the source red, green, and blue color channels when a color image is converted to grayscale.
Color Monochrome	Desaturates the image and applies a color tint of your choosing to the midtones.
Sepia Tone	Changes a color image to sepia. Allows you to desaturate the color image to the level of sepia coloring you want.
Sharpen	Sharpens the image. In Aperture 3, it is recommended to use the Edge Sharpen adjustment to sharpen images.
Edge Sharpen	Sharpens the image based on luminance using multiple sharpening passes.
Vignette	Applies a vignette effect to the image.

Note: You can also modify how OS X decodes RAW files using the RAW Fine Tuning controls, and you can modify iPhoto effects for images you're working with in iPhoto. For more information about decoding RAW files, see [An Overview of the RAW Fine Tuning Controls](#) on page 289. For more information about working with iPhoto, see [Working with iPhoto Effects](#) on page 295.

Quick Brush Adjustments

You can make the following adjustments to images in Aperture using Quick Brushes. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Quick Brush	Function
Skin Smoothing	Smooths people's skin by subtly blurring wrinkles and skin pores in the area of the image the adjustment is brushed on.
Dodge (Lighten)	Dodges (lightens) the area of the image the adjustment is brushed on.
Burn (Darken)	Burns (darkens) the area of the image the adjustment is brushed on.
Polarize (Multiply)	Deepens the colors in the image by specifically darkening the shadows and midtones while preserving the highlights in the area of the image the adjustment is brushed on.
Intensify Contrast (Overlay)	Corrects the shadow areas of the image that appear washed out by intensifying the contrast between pure black and 50% gray in the area of the image the adjustment is brushed on.
Tint	Shifts the tint in the area of the image the adjustment is brushed on.
Contrast	Applies additional contrast to the area of the image the adjustment is brushed on.
Saturation	Saturates the colors in the area of the image the adjustment is brushed on.
Definition	Adds clarity and reduces haze without adding too much contrast to the area of the image the adjustment is brushed on.
Vibrancy	Adds saturation to desaturated colors only in the area of the image the adjustment is brushed on. Skin tones are not affected.
Blur	Blurs (softens) the area of the image the adjustment is brushed on.
Sharpen	Sharpens the area of the image the adjustment is brushed on.
Halo Reduction	Removes blue and purple fringes in the image the adjustment is brushed on. Fringing is occasionally produced by certain lenses when the image is overexposed.
Noise Reduction	Removes digital noise in the area of the image the adjustment is brushed on.

Using the Adjustment Controls

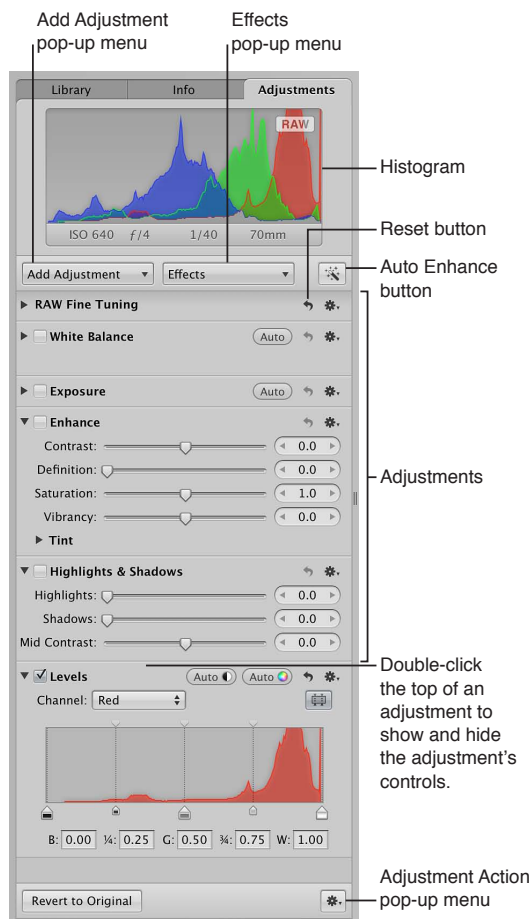
Using the Adjustments Inspector and Inspector HUD

You can use menu commands, keyboard shortcuts, or the Inspector button on the left side of the toolbar to show and hide the Inspector pane containing the adjustment controls. The adjustment controls in the Adjustments inspector are also found in the Adjustments pane of the Inspector HUD. You can use menu commands and buttons in the Full Screen view toolbar to show or hide the Inspector HUD.

To show the Adjustments inspector

Do one of the following:

- Choose Window > Show Inspector (or press I), then click the Adjustments tab.
- Click the Inspector button in the toolbar, then click the Adjustments tab.



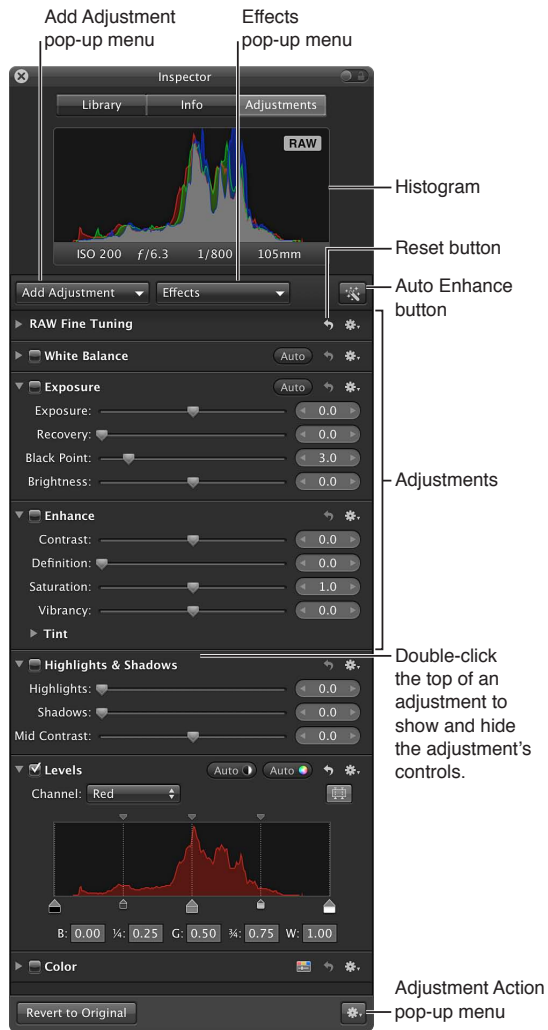
Each adjustment contains individual properties, called *parameters*, for which you can specify a range of values. You click an adjustment's disclosure triangle, or double-click the top of the adjustment, to view the parameters for the adjustment and the controls you use to change parameter values. For more information about using the adjustment controls to change parameter values, see [Using Sliders](#) on page 268.

To show the Adjustments pane of the Inspector HUD

Do one of the following:

- Choose Window > Show Inspector HUD (or press H), then click the Adjustments button.
- Click the Inspector HUD button in the Full Screen view toolbar, then click the Adjustments button.

For more information about Full Screen view, see [Performing Adjustments in Full Screen View](#) on page 271.



Note: The adjustment controls in the Adjustments inspector and the Adjustments pane of the Inspector HUD appear dimmed when an audio or video clip is selected.

To choose a histogram view

When you show the Adjustments inspector or the Adjustments pane of the Inspector HUD, a histogram of the selected image's luminance or color channels appears. The histogram displays a graph of the brightness values in the image, from the blackest point to the whitest point. You can adjust the histogram to show luminance; red, green, and blue (RGB) channels displayed together; or separate red, green, and blue channels.

- Choose a view option from the Histogram Options section of the Adjustment Action pop-up menu (with a gear icon).

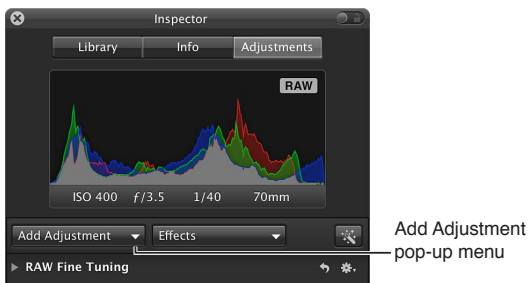
Note: The histogram updates in real time for images displayed in the Viewer and in Full Screen view, but it is slightly delayed in the Book Layout Editor, the Webpage Editor, and the Light Table. For more information about how to interpret a histogram, see [An Overview of Histograms](#) on page 295.

To add additional adjustments

The first time you show either the Adjustments inspector or the Adjustments pane of the Inspector HUD, only the White Balance, Exposure, Enhance, Highlights & Shadows, Levels, and Color adjustments are available.

Note: A photo must be selected in the Browser in order for adjustment controls to appear in the Adjustments inspector or the Adjustments pane of the Inspector HUD.

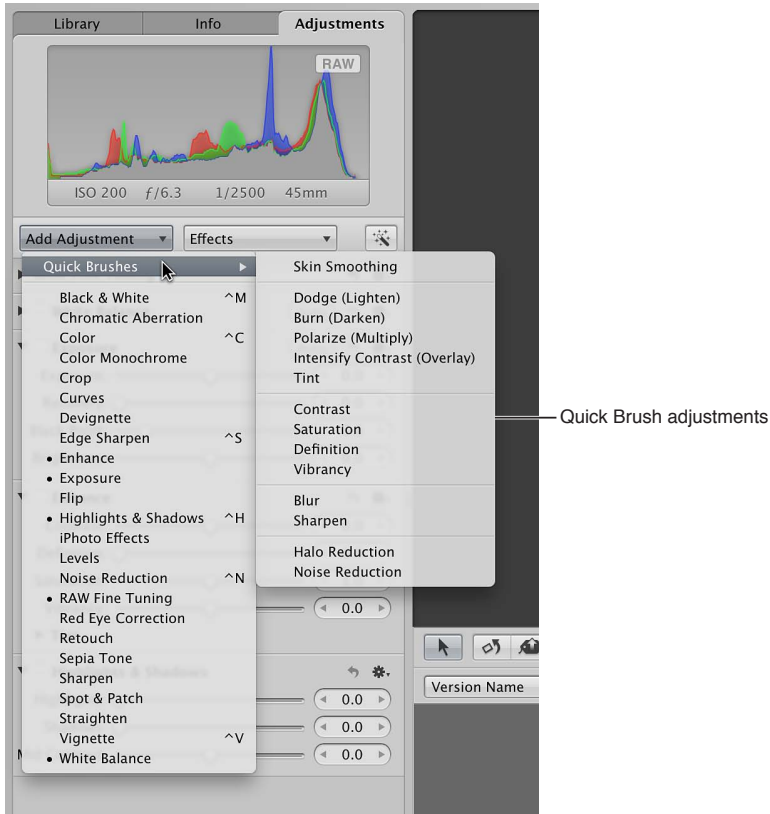
- Choose an adjustment from the Add Adjustment pop-up menu at the top of either the Adjustments inspector or the Adjustments pane of the Inspector HUD.



The new adjustment appears highlighted in both the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown. For more information about adjustment controls, see [Using Sliders](#) on page 268.

To add Quick Brushes

- Choose a Quick Brush adjustment from the Add Adjustment pop-up menu at the top of either the Adjustments inspector or the Adjustments pane of the Inspector HUD.

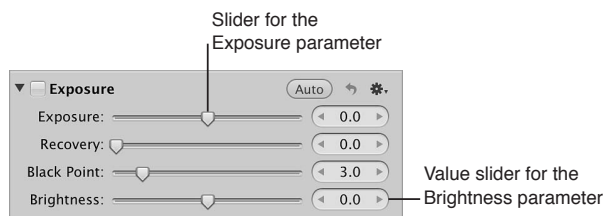


The adjustment controls for the Quick Brush appear in both the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown. Also, a HUD containing the Quick Brush controls appears, and the pointer changes to a brush. For more information about Quick Brush adjustments, see [Using the Brush Controls](#) on page 269.

Using Sliders

There are two types of slider controls for changing parameter values—sliders and value sliders. Slider controls have varying value ranges depending on the parameter.

- Sliders*: Drag the slider left or right to set a value, or click anywhere along the slider's range to jump directly to that value.



- Value sliders*: Double-click the value and type a number in the value field, click the left or right arrow, or drag inside the value field to set a value. Often, you can type a much larger number in the value field than can be achieved by dragging the standard sliders. When using value sliders, you can use a modifier key to make value adjustments in small or large increments.

To change values in small increments

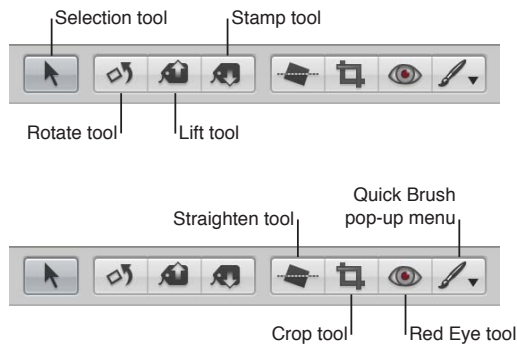
- Option-drag in the value field.

To change values in large increments

- Shift-drag in the value field.

Working with Adjustment Tools in the Tool Strip

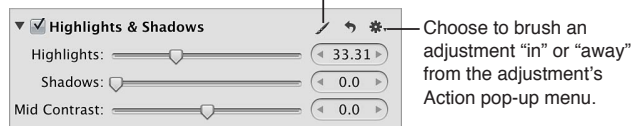
When the Viewer is shown, the tool strip contains tools for working with your images in the Viewer and Browser. Many of the adjustment tools also work in conjunction with adjustment controls.



Using the Brush Controls

Whenever a photo is selected and displayed in the Viewer or in Full Screen view, you can retouch it using a brushed adjustment, which allows you to manually target a specific part of the image using brush controls. Most adjustments can be brushed on images. You choose a brush for an adjustment from the adjustment's Action pop-up menu.

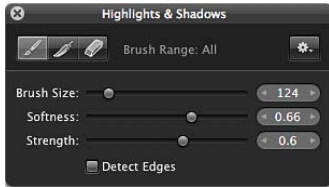
A Brush button appears when the adjustment is brushed on the photo. Click the button to open the Brush HUD for the adjustment.



In addition to brushing standard adjustments, you can also use Quick Brush adjustments that are specifically designed for brushing on images. Quick Brush adjustments are accessible from the Add Adjustment pop-up menu in the Adjustments inspector and the Adjustments pane of the Inspector HUD, as well as from the Quick Brush pop-up menu in the tool strip.



When you choose to brush an adjustment, its Brush HUD appears. You specify settings using the controls in the HUD and then brush the adjustment on the image.



When you choose a Quick Brush adjustment, its adjustment controls appear highlighted in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown. As with the standard adjustment controls, you use the checkbox to turn Quick Brush adjustments on and off. For more information, see [Resetting and Turning Off Adjustments](#) on page 270. Some Quick Brush adjustments also have sliders for changing parameter values after the Quick Brush adjustment has been applied. For more information about adjustment controls, see [Using Sliders](#) on page 268.



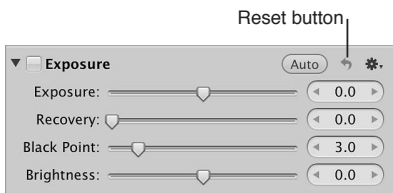
For more information about the individual Quick Brush adjustments and how to apply them to an image, see [An Overview of Brushed Adjustments](#) on page 392.

Resetting and Turning Off Adjustments

You can reset all of the parameters for an adjustment to their default values. You can also use the checkboxes to turn adjustments on and off. Turning adjustments on and off is a good way to verify the cumulative effect of adjustments on your image.

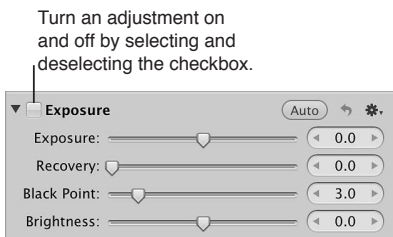
To reset all parameter values for an adjustment

- Click the Reset button to the right of the adjustment name.



To turn an adjustment on and off

- Select the checkbox next to the adjustment's name to turn it on, and deselect the checkbox to turn it off.



Accessing Adjustment Controls from Aperture Editors

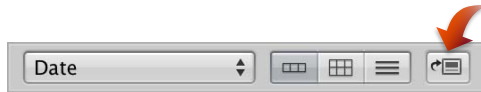
Whenever a photo is selected and displayed in the Viewer or in Full Screen view, you can adjust it using the adjustment controls in the Adjustments inspector or the Adjustments pane of the Inspector HUD. You can also adjust images in the Book Layout Editor, Webpage Editor, Slideshow Editor, and Light Table.

Note: Some of the adjustment controls are not available for use in the Book Layout Editor, Webpage Editor, Slideshow Editor, and Light Table, but you can easily switch to the Viewer to make your changes.

To switch to the Viewer from the Book Layout Editor, Webpage Editor, Slideshow Editor, or Light Table

Do one of the following:

- Click the Show Viewer button at the top of the Browser.



When you have finished making the adjustment, click the Show Viewer button again to return to the previous view.

- If you have a system that has more than one display, choose View > Secondary Viewer > Alternate, then perform the adjustments on the second display.

For more information about using Aperture with multiple displays, see [Viewing Photos on Multiple Displays](#) on page 116.

Performing Adjustments in Full Screen View

Full Screen view, which displays photos against a solid background and contains only a few interface elements, provides the best onscreen work environment for performing color adjustments. It is highly recommended that you perform adjustments in Full Screen view to achieve the best results possible. For more information about Full Screen view, see [An Overview of Full Screen View](#) on page 125.

To switch to Full Screen view

Do one of the following:

- Choose View > Full Screen (or press F).
- Click the Full Screen button in the toolbar.

To switch back to the Aperture main window

Do one of the following:

- Click the Exit Full Screen button in the Full Screen view toolbar.
- Press F or the Esc (Escape) key.

To show the Inspector HUD while in Full Screen view

- Press H.

To lock the Inspector HUD to the side of the screen so that it doesn't overlap the image

- Click the Always Show Inspector HUD control in the top-right corner of the HUD.

To access a tool in Full Screen view

- Move your pointer to the top of the screen until the Full Screen view toolbar appears, then select a tool.



To keep the Full Screen view toolbar on the screen

By default, the toolbar is not shown in Full Screen view until the pointer is moved to the top of the screen. You can set the toolbar to remain on the screen.

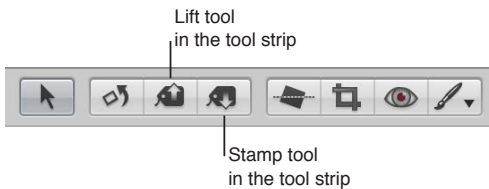
- Move the pointer to the top of the screen in Full Screen view, then click the Always Show Toolbar control in the toolbar.

Applying Adjustments to a Group of Images

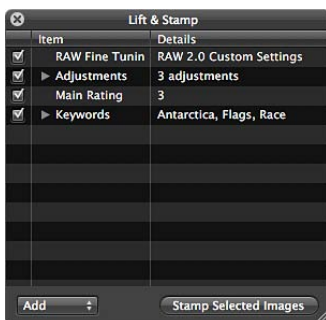
You can apply an adjustment or group of adjustments to a range of images by first applying the adjustments to one image and then lifting the adjustments from the first image and stamping them on the other images. You do this by using the Lift and Stamp tools and the Lift & Stamp HUD.

To lift adjustments from one image and stamp them on a group of images

- 1 In the Browser, select the photo that has the adjustments you want to copy.
- 2 In the tool strip, select the Lift tool (or press O).

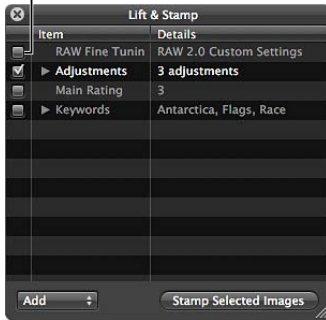


The Lift & Stamp HUD appears, showing the adjustments, IPTC metadata, and keywords applied to the image.

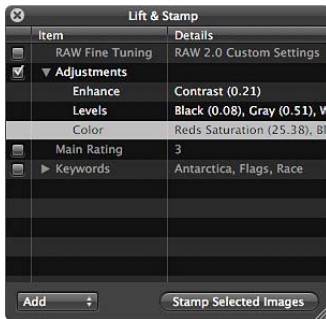


- 3 Deselect all metadata-related checkboxes to prevent Aperture from copying the metadata from the selected photo.

Deselect a checkbox to prevent Aperture from copying the item from the selected photo.



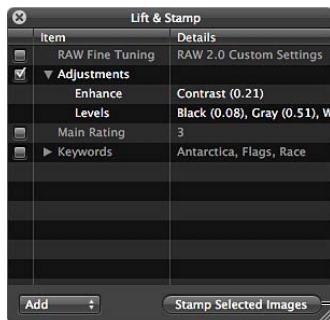
- 4 If necessary, remove any unwanted adjustments by clicking the Adjustments disclosure triangle in the Lift & Stamp HUD, selecting the unwanted adjustments, and then pressing Delete.



Select an adjustment and press Delete to remove it.

- 5 In the tool strip, select the Selection tool (or press A), then do one of the following:
 - Drag a selection rectangle around the photos to which you want to apply the adjustments.
 - Select the photos to which you want to apply the adjustments by Shift-clicking to select a range of adjacent photos and Command-clicking to select nonadjacent photos.

Note: The adjustments aren't applied to photos within closed stacks. If you want to stamp the adjustments on photos within a stack, you must open it first by choosing Stacks > Open Stack (or pressing Shift-K).
- 6 Do one of the following:
 - In the tool strip, select the Stamp tool.
 - In the Lift & Stamp HUD, click the Stamp Selected Images button.



Click the Stamp Selected Images button to apply the adjustments to the selected images.

The adjustments copied from the first photo are applied to the selected photos. For more information about using the Lift & Stamp HUD, see [Applying Keywords Using the Lift & Stamp HUD](#) on page 167.

Applying the Same Adjustment to an Image Multiple Times

Some images can be difficult to perfect. Images shot in mixed lighting and low-light conditions often require the same adjustment applied multiple times in small increments in order to achieve the appearance you're looking for. For example, an image shot in low-light conditions may require multiple incremental Noise Reduction adjustments so that the image is not muddied by a single strong Noise Reduction adjustment. In Aperture, adjustments are applied from top to bottom. In this situation, you can add the Noise Reduction controls with a slight Radius adjustment coupled with a slight Edge Detail adjustment, and then add the same Noise Reduction controls to the Adjustments inspector again, with the same incremental settings. In some situations, incremental adjustments can produce a superior overall adjustment to the image.

To add the same adjustment multiple times

- Choose Add New [adjustment] from the Action pop-up menu for the adjustment.

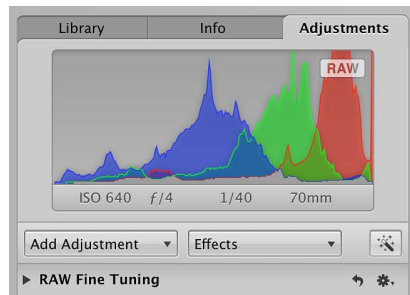


Another set of adjustment controls for the same adjustment appears in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

Working with Effects

An Overview of Effects

If you frequently use the same adjustment parameter settings, you can save these settings as an effect. You can create new effects, rename and rearrange effects, and delete effects you no longer use. When you create an effect, it appears in the Effects pop-up menu. You can create effects for individual adjustments or for a set of multiple adjustments. For example, you can create an effect for creating black-and-white images. When your workflow calls for creating a set of black-and-white images, you simply choose your saved effect from the Effects pop-up menu at the top of the Adjustments inspector or the Adjustments pane of the Inspector HUD.



When you delete an effect, adjustments already applied to your images are unaffected.

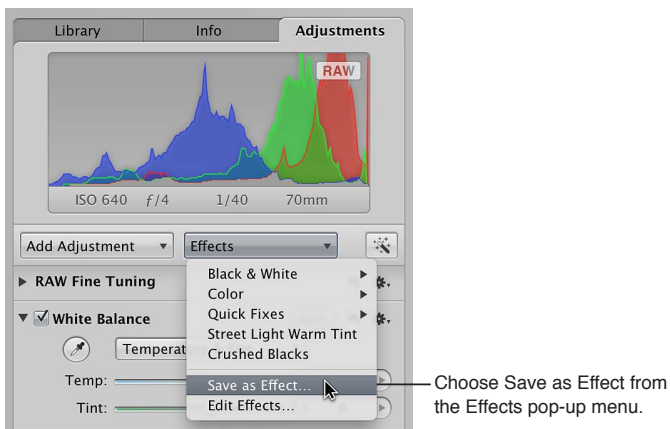
Important: In previous versions of Aperture, effects (formerly known as *adjustment presets*) for single adjustments were accessible via the Preset Action pop-up menu for each adjustment. Presets were created and stored in the preset dialog for that adjustment. If you created and saved adjustment presets in a previous version of Aperture, the adjustment presets now appear as effects in the Effects pop-up menu at the top of the Adjustments inspector or the Adjustments pane of the Inspector HUD. If you want to remove adjustment presets created in previous versions of Aperture, see [Deleting Effects](#) on page 281.

Creating Effects

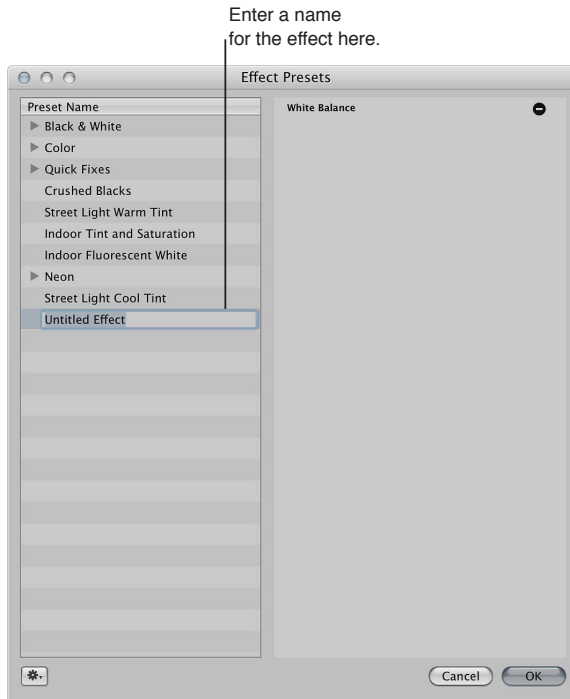
Creating an effect is as simple as saving the adjustment parameter settings and naming the effect using the Effects pop-up menu and the Effect Presets dialog.

To create an effect

- 1 Select a photo with the adjustment parameter settings you want to save.
- 2 At the top of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Save as Effect from the Effects pop-up menu.



- 3 In the Effect Presets dialog, enter a name for the new effect, then click OK.



The adjustment parameter settings are saved as an effect, and the new effect is now available for use in the Effects pop-up menu in the Adjustments inspector or the Adjustments pane of the Inspector HUD.

Applying Effects

Applying an effect to an image is as simple as selecting the photo and choosing the effect from the Effects pop-up menu. When you apply an effect to an image, the adjustment controls and parameter values update to reflect the settings saved in the effect. If you prefer, you can use an effect as a starting point in your image adjustment workflow and then fine-tune the effect after it's applied to the image.

To apply an effect to an image

- 1 Select a photo.
- 2 In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose the effect you want to apply to the image from the Effects pop-up menu.

Note: When you place the pointer over an effect in the Effects pop-up menu, a preview of the adjustment applied to the image is shown to the right of the highlighted effect.



Place the pointer over an effect to preview its effect on the photo.

The effect is applied to the image. If the image already had some adjustments applied to it, the effect is applied in addition to the previous adjustment settings.

To replace the adjustments previously applied to an image with an effect

If an image already has adjustments applied to it, you can replace the previously applied adjustments with the adjustment parameter values saved in the effect.

- Hold down the Option key while choosing the effect from the Effects pop-up menu at the top of the Adjustments inspector or the Adjustments pane of the Inspector HUD.

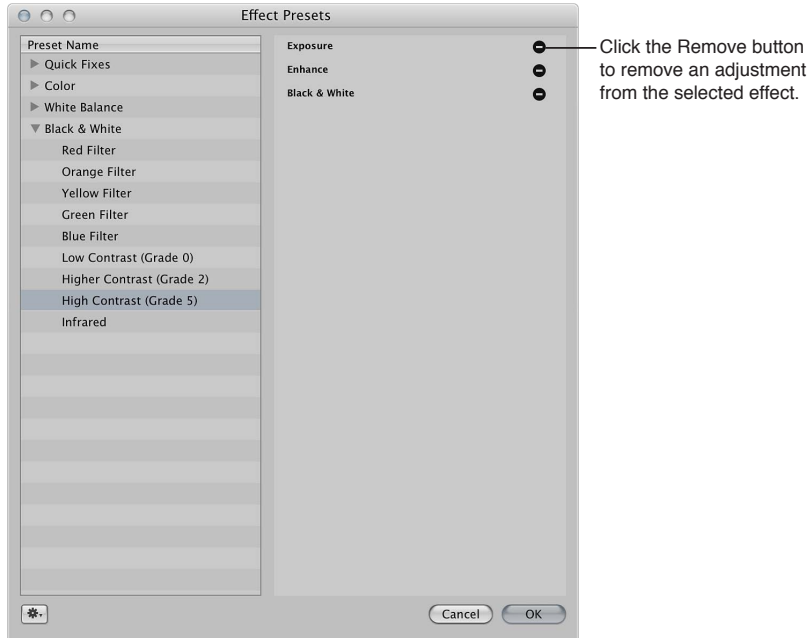
Removing Adjustments from an Effect

You can pare down the adjustment parameter settings in an effect by removing adjustments from the effect in the Effect Presets dialog.

To remove an adjustment from an effect

- 1 In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Edit Effects from the Effects pop-up menu.

- 2 In the Effect Presets dialog, select the effect you want to modify, then click the Remove (-) button beside the adjustment you want removed from the selected effect.



The adjustment and its parameter values are removed from the effect.

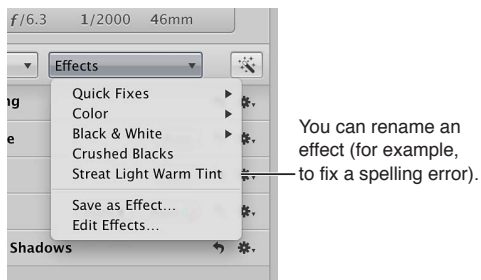
- 3 Repeat step 2 until all of the adjustments you want removed from the selected effect have been removed, then click OK.

Renaming Effects

You can rename an effect at any time.

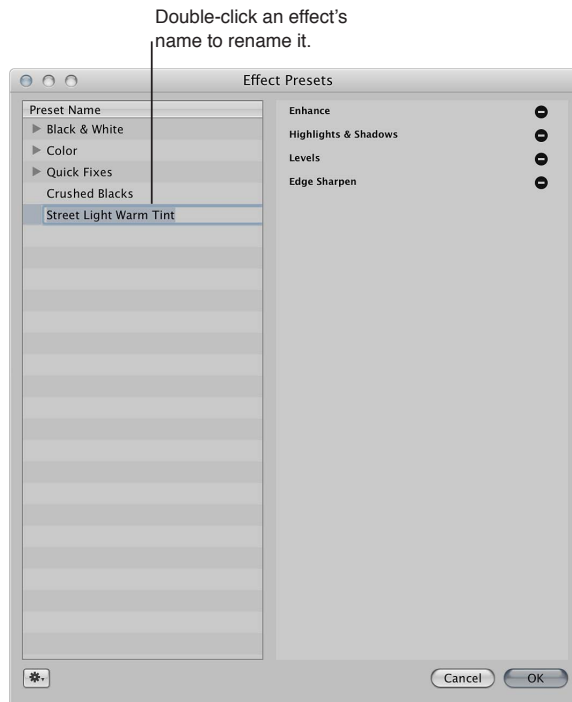
To rename an effect

- 1 In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Edit Effects from the Effects pop-up menu.



- 2 In the Effect Presets dialog, double-click the name of the effect you want to change.

The effect's name is highlighted.



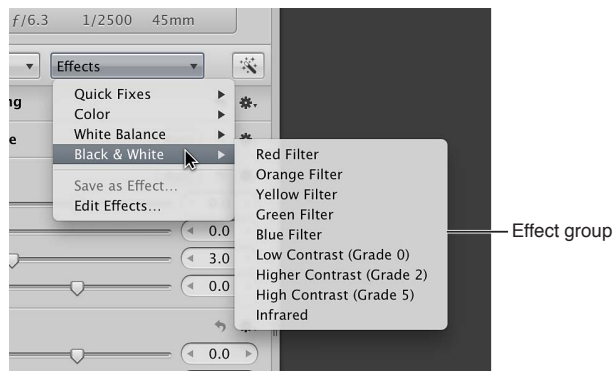
- 3 Enter a new name, then press Return.

The effect is renamed.

Organizing Effects

Each time you create an effect, it is added to the bottom of the list of effects in the Effect Presets dialog and the Effects pop-up menu. As this list grows, it can become difficult to locate a specific effect in a long list of effects. You can rearrange the order of the effects in the Effect Presets dialog to make effects easier to find.

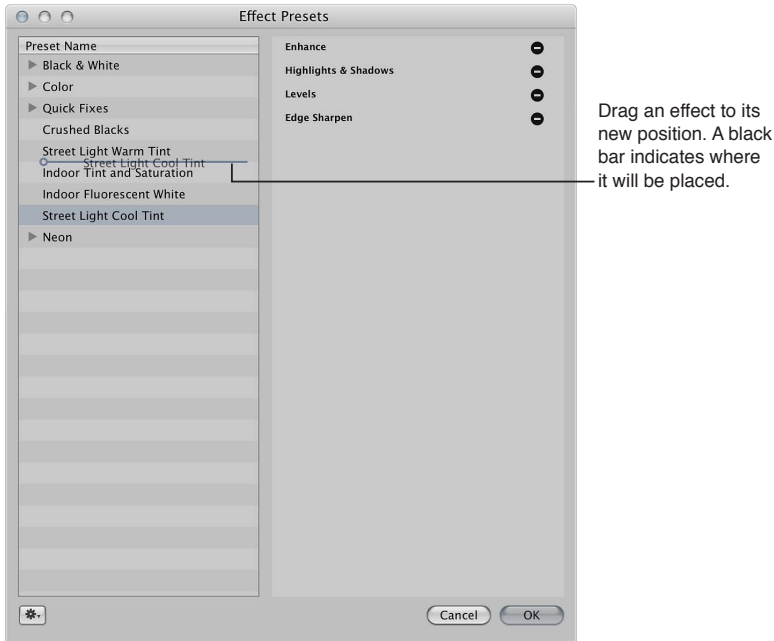
You can also organize effects of like type by grouping them together into effect groups. Creating effect groups helps reduce the list of effects that are initially displayed in the Effects pop-up menu. For example, if you have several types of Color adjustment settings saved as individual effects, you can create an effect group for Color effects, named Color. When you choose Color from the Effects pop-up menu, the individual Color effects are displayed in a submenu to the right.



To rearrange the order of effects

- 1 In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Edit Effects from the Effects pop-up menu.
- 2 In the Effect Presets dialog, drag an effect to a new position.

A black bar indicates where the effect will be placed.



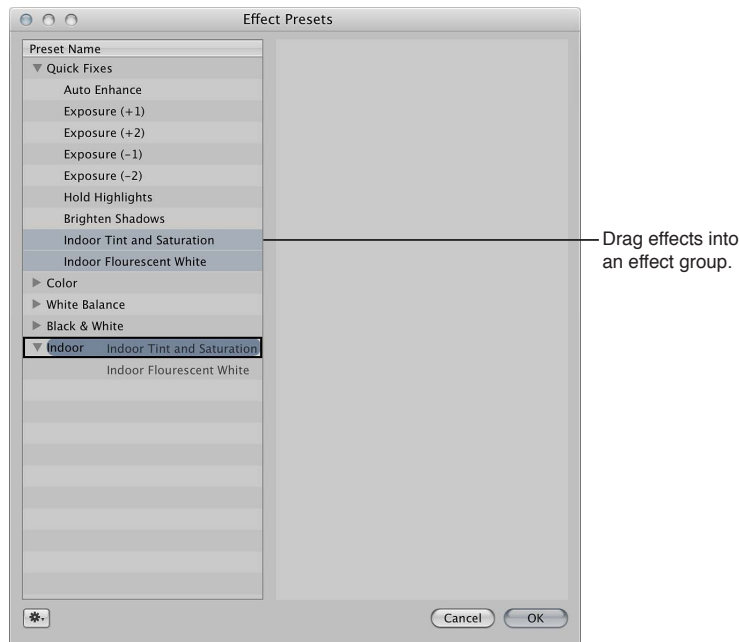
- 3 Repeat step 2 until your effects list is organized, then click OK.

The effects list in the Effects pop-up menu is updated to match the order of effects in the Effect Presets dialog.

To create an effect group

- 1 In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Edit Effects from the Effects pop-up menu.
- 2 In the Effect Presets dialog, choose New Preset Group from the Effect Action pop-up menu (with a gear icon).
- 3 Give the new effect group a name and press Return.

4 Drag effects into the effect group.



The effects are consolidated into the effect group and can be accessed by clicking the disclosure triangle to the left of the effect group's name.

5 Click OK.

Deleting Effects

You can delete an effect at any time. Any adjustments that were previously applied to images using the effect remain applied.

To delete an effect

- 1 In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Edit Effects from the Effects pop-up menu.
- 2 In the Effect Presets dialog, select the effect you want to delete, then do one of the following:
 - Press the Delete key.
 - Choose Delete Preset from the Effect Action pop-up menu (with a gear icon), then click Delete in the dialog that appears.

The effect is deleted.

Sharing Effects

You can share your saved effects with another Aperture system.

To share your effects with another Aperture system

- 1 On the first Aperture system, choose Edit Effects from the Effects pop-up menu at the top of the Adjustments inspector or the Adjustments pane of the Inspector HUD.
- 2 In the Effect Presets dialog, select the effect you want to share.

Note: To share more than one effect, you have to create an effect group and then select the group. For more information about creating effect groups, see [Organizing Effects](#) on page 279.
- 3 Choose Export from the Effect Action pop-up menu (with a gear icon).

- 4 In the dialog that appears, enter an effect name in the Save As field, choose a location to export the effect to, then click Save.

The effect is exported to the location you selected as `[name].AdjustmentPresets`. It's a good idea to export the effect to a location the other Aperture system can access. Effect files are small and can be easily sent to another Aperture system via email.

- 5 On the second Aperture system, navigate to the location of the effect file and double-click it.

The effect is transferred to the second Aperture system and accessed via the Effects pop-up menu.

Restoring the Default Effects

If you've created and modified so many effects that they have become too difficult to manage, you can restore the default effects that came with Aperture.

To restore the default effects

- 1 In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Edit Effects from the Effects pop-up menu.
- 2 In the Effect Presets dialog, choose Reset All to Factory Settings from the Effect Action pop-up menu (with a gear icon).

Working with Adjustments Applied in iOS Devices

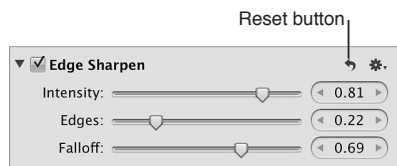
When you take a photo using an iPad, iPhone, or iPod touch with iOS 5 and then apply adjustments to the image using the iOS device, the image adjustments are retained and automatically applied when the image is imported into Aperture. However, you can modify the adjustments in Aperture at any time.

Removing Adjustments

In Aperture, there are two ways to remove adjustments from an image. You can remove specific adjustments, or you can remove all adjustments from a photo selection at once.

To remove a single adjustment from an image

- Select a photo, then click the Reset button for the adjustment you want to remove.



To remove all adjustments from an image

- 1 Select a photo.
- 2 Do one of the following:
 - Choose Photos > Revert to Original.
 - In the bottom-left corner of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the Revert to Original button.

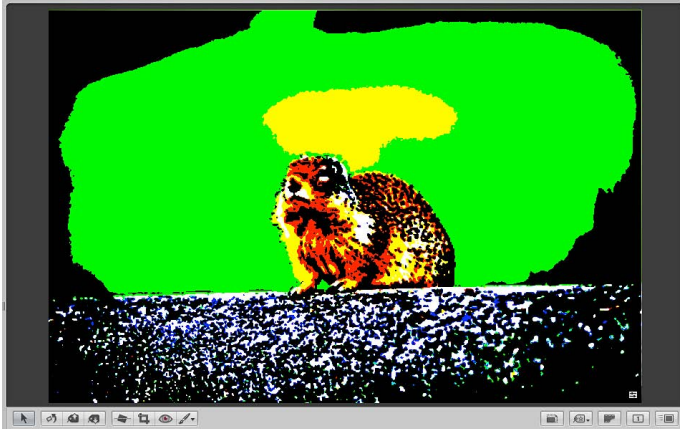


All adjustments applied to the image are removed.

Using Modifier Keys to Identify Color Clipping

Identifying Color Channel Clipping

When performing adjustments, it's useful to know if you're clipping one or more color channels and thereby losing important image details. In Aperture, you can use modifier keys to get instant feedback on channel clipping when using controls in the Exposure and Levels adjustments. Color overlays appear on the image when you press the Command key and drag the sliders to indicate that any, all, or a combination of color channels have been clipped.



To identify color channel clipping

- Press Command while dragging the following sliders:
 - *Exposure slider (Exposure controls)*: Shows highlight clipping.
 - *Recovery slider (Exposure controls)*: Shows highlight clipping.
 - *Black Point slider (Exposure controls)*: Shows shadow clipping.
 - *Black Levels slider (Levels controls)*: Shows shadow clipping.
 - *White Levels slider (Levels controls)*: Shows highlight clipping.

If one or more color channels are clipped as a result of adjusting one of the above parameters, colored overlays appear over the areas of the image where clipping is occurring. Release the Command key, and the color overlays disappear.

The color of the overlay indicates which color channel is clipped. For more information, [Setting Color Channel Clipping Overlay Colors](#) on page 284.

Note: The color channel clipping overlays appear regardless of whether Highlight Hot & Cold Areas is turned on. For more information about the Highlight Hot & Cold Areas feature, see [Showing Hot and Cold Areas in Your Photos](#) on page 116.

Setting Color Channel Clipping Overlay Colors

The color of the color channel clipping overlay indicates which color channel or combination of color channels is clipped. In addition, Aperture gives you the option of choosing color or monochromatic overlays to indicate clipping.

To set the color channel clipping overlay color

- 1 Choose Aperture > Preferences, then click Advanced.
- 2 Choose one of the following options from the Clipping Overlay pop-up menu:
 - *To display the clipping overlays in shades of color:* Choose Color.
For more information about how the color overlays correspond to individual adjustment parameter settings, see [Color Overlay Descriptions](#) on page 284.
 - *To display the clipping overlays in black, shades of gray, and white:* Choose Monochrome.
For more information about how the monochrome overlays correspond to individual adjustment parameter settings, see [Monochrome Overlay Descriptions](#) on page 285.

Color Overlay Descriptions

The following sections list the color overlays and the corresponding color channels that have been clipped by the adjustment parameter setting.

Exposure parameter (Exposure adjustment)

- *Red:* Indicates highlight clipping in the red color channel.
- *Green:* Indicates highlight clipping in the green color channel.
- *Blue:* Indicates highlight clipping in the blue color channel.
- *Yellow:* Indicates highlight clipping in the red and green color channels.
- *Pink:* Indicates highlight clipping in the red and blue color channels.
- *Cyan:* Indicates highlight clipping in the blue and green color channels.
- *White:* Indicates highlight clipping in all three color channels.
- *Black:* Indicates no highlight clipping in any color channel.

Recovery parameter (Exposure adjustment)

- *Red:* Indicates highlight clipping in the red color channel.
- *Green:* Indicates highlight clipping in the green color channel.
- *Blue:* Indicates highlight clipping in the blue color channel.
- *Yellow:* Indicates highlight clipping in the red and green color channels.
- *Pink:* Indicates highlight clipping in the red and blue color channels.
- *Cyan:* Indicates highlight clipping in the blue and green color channels.
- *White:* Indicates highlight clipping in all three color channels.
- *Black:* Indicates no highlight clipping in any color channel.

Black Point parameter (Exposure adjustment)

- *Red:* Indicates shadow clipping in the red color channel.
- *Green:* Indicates shadow clipping in the green color channel.
- *Blue:* Indicates shadow clipping in the blue color channel.
- *Yellow:* Indicates shadow clipping in the red and green color channels.
- *Pink:* Indicates shadow clipping in the red and blue color channels.
- *Cyan:* Indicates shadow clipping in the blue and green color channels.

- *White*: Indicates no shadow clipping in any color channel.
- *Black*: Indicates shadow clipping in all three color channels.

Black Levels parameter (Levels adjustment)

- *Red*: Indicates shadow clipping in the red color channel.
- *Green*: Indicates shadow clipping in the green color channel.
- *Blue*: Indicates shadow clipping in the blue color channel.
- *Yellow*: Indicates shadow clipping in the red and green color channels.
- *Pink*: Indicates shadow clipping in the red and blue color channels.
- *Cyan*: Indicates shadow clipping in the blue and green color channels.
- *White*: Indicates no shadow clipping in any color channel.
- *Black*: Indicates shadow clipping in all three color channels.

White Levels parameter (Levels adjustment)

- *Red*: Indicates highlight clipping in the red color channel.
- *Green*: Indicates highlight clipping in the green color channel.
- *Blue*: Indicates highlight clipping in the blue color channel.
- *Yellow*: Indicates highlight clipping in the red and green color channels.
- *Pink*: Indicates highlight clipping in the red and blue color channels.
- *Cyan*: Indicates highlight clipping in the blue and green color channels.
- *White*: Indicates highlight clipping in all three color channels.
- *Black*: Indicates no highlight clipping in any color channel.

Monochrome Overlay Descriptions

The following sections list the monochrome overlays and the corresponding color channels that have been clipped by the adjustment parameter setting.

Exposure parameter (Exposure adjustment)

- *White*: Indicates highlight clipping in all color channels.
- *66% gray*: Indicates highlight clipping in two color channels.
- *33% gray*: Indicates highlight clipping in one color channel.
- *Black*: Indicates no highlight clipping in any color channel.

Recovery parameter (Exposure adjustment)

- *White*: Indicates highlight clipping in all color channels.
- *66% gray*: Indicates highlight clipping in two color channels.
- *33% gray*: Indicates highlight clipping in one color channel.
- *Black*: Indicates no highlight clipping in any color channel.

Black Point parameter (Exposure adjustment)

- *White*: Indicates no shadow clipping in any color channel.
- *66% gray*: Indicates shadow clipping in one color channel.
- *33% gray*: Indicates shadow clipping in two color channels.
- *Black*: Indicates shadow clipping in all three color channels.

Black Levels parameter (Levels adjustment)

- *White*: Indicates no shadow clipping in any color channel.
- *66% gray*: Indicates shadow clipping in one color channel.
- *33% gray*: Indicates shadow clipping in two color channels.
- *Black*: Indicates shadow clipping in all three color channels.

White Levels parameter (Levels adjustment)

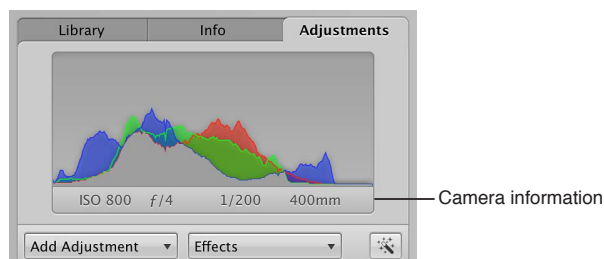
- *White*: Indicates highlight clipping in all color channels.
- *66% gray*: Indicates highlight clipping in two color channels.
- *33% gray*: Indicates highlight clipping in one color channel.
- *Black*: Indicates no highlight clipping in any color channel.

Using the Color Meter and Displaying Camera Information

Aperture provides a built-in Color meter you can use to sample the color values in an image and display them as RGB, Lab, CMYK, HSL, or HSB values. When you place the pointer over a photo or thumbnail, the color values are displayed in the Adjustments inspector or the Adjustments pane of the Inspector HUD. You can also use the Loupe for a more accurate pixel selection and see the color values displayed within the magnified area of the Loupe. When the pointer is moved away from the photo, the color values are replaced by basic EXIF metadata values for the image, such as ISO setting, f-stop, shutter speed, and focal length.

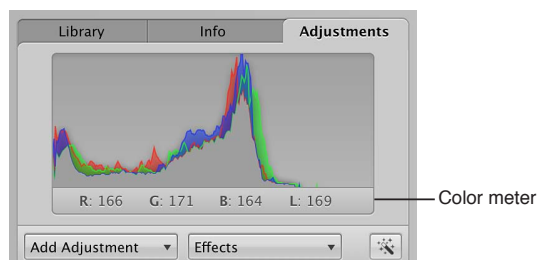
To display camera and color information

- In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Show Camera/Color Info from the Adjustment Action pop-up menu (with a gear icon).



To use the pointer to sample the color values in an image

- Place the pointer over the area of the image where you want to sample the color values, and view the values at the top of the Adjustments inspector or the Adjustments pane of the Inspector HUD.



To use the Loupe to sample color values in an image

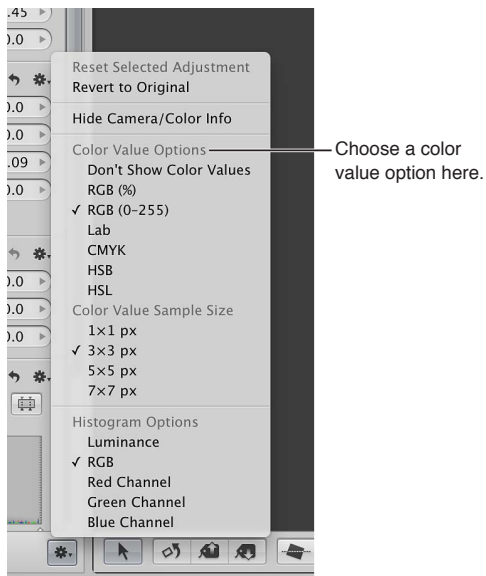
- 1 Click the Loupe button in the toolbar, or press the Grave Accent (`) key.
- 2 Choose View > Loupe Options > Show Color Value in Loupe, or press Shift-Option-Tilde (~).
- 3 Place the target area of the Loupe over the area of the image where you want to sample the color values.

The color values appear in the magnified area of the Loupe.



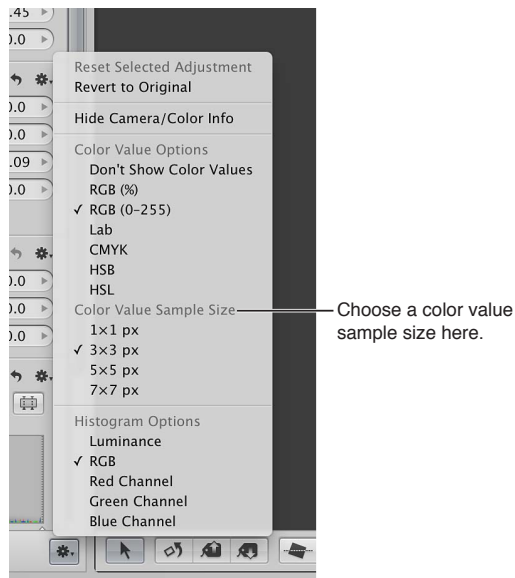
To choose a color value option for the Color meter

- In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose a color value option from the Adjustment Action pop-up menu (with a gear icon).



To choose a color value sample size (pixel area) for the Color meter

- In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose an appropriate color value sample size from the Adjustment Action pop-up menu (with a gear icon).



Using an External Editor

If you need to perform more advanced image operations, such as compositing, you can set an external editor for use within Aperture. First you have to specify which application Aperture should use and the file format (TIFF or PSD). You only have to do this once. Then you select a photo and choose a menu command to have the photo open in the application designated as the external editor. You can also set an external editor for audio and video files.

To set an external editor for photos in Aperture

- 1 Choose Aperture > Preferences, then click Export.
- 2 Click the Choose button to the right of the External Photo Editor field, navigate to an application in the Select Application dialog, then click Select.

The application's name appears in the External Photo Editor field.

- 3 Choose the appropriate file format (TIFF or PSD) from the External Editor File Format pop-up menu, then enter a resolution in the dpi field.

This is the file format Aperture uses when opening files in external editors.

Tip: It's a good idea to choose the 16-bit option for the External Editor file format because the larger bit depth provides an exponentially higher number of colors each pixel can express, and the higher bit depth option helps reduce color clipping and banding.

To set an external editor for audio and video files in Aperture

- 1 Choose Aperture > Preferences, then click Export.
- 2 Do one or both of the following:
 - *To set an external editor for audio files:* Click the Choose button to the right of the External Audio Editor field, navigate to an application in the Select Audio Application dialog, then click Select.

The application's name appears in the External Audio Editor field.

- *To set an external editor for video files:* Click the Choose button to the right of the External Video Editor field, navigate to an application in the Select Video Application dialog, then click Select. The application's name appears in the External Video Editor field.

To use an external editor in Aperture

- 1 Select an item in the Browser.
- 2 Choose Photos > Edit with > External Editor (or press Command-Shift-O).

Aperture creates a new original (leaving the original unchanged), converts it to the chosen file format, and then opens the file in the external editor. The file is tracked as a new original stacked with the previous original.

- 3 When you've finished modifying the image, audio, or video file in the external application, save the file.

The saved file is automatically updated in Aperture.

Working with the RAW Fine Tuning Controls

An Overview of the RAW Fine Tuning Controls

You can modify how OS X decodes RAW files using the adjustment controls in the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD. OS X characterizes the RAW file format for each digital camera supported by Aperture. This calibration data usually results in the optimal decoding of the RAW image files for a particular camera. However, certain types of images may require adjustments to how OS X decodes the RAW image file.

The RAW Fine Tuning controls include the following parameters:

- *Boost:* Use the Boost and Hue Boost sliders and value sliders to control image contrast. For more information, see [Using the Boost Controls](#) on page 290.
- *Sharpening:* Use the Sharpening and Detail sliders and value sliders to fine-tune the amount of sharpening you want applied to images during the RAW decoding process. For more information, see [Using the Sharpening Controls](#) on page 291.
- *Moire:* Use the Moire and Radius sliders and value sliders to correct color fringing in high-contrast edges and the moire pattern effect found in images with subjects whose linear patterns introduce the effect, such as a brick wall or a picket fence. For more information, see [Using the Moire Controls](#) on page 292.



Note: Some controls in the RAW Fine Tuning area of the Adjustments inspector and the Adjustments pane of the Inspector HUD appear dimmed if these settings are not available for use with images derived from a particular RAW file format. Some camera models can create multiple types of RAW file formats, and different controls may be available for each of these RAW file formats.

Using these controls, you can fine-tune your RAW decoding settings on an image-by-image basis. Aperture also enables you to save your customized RAW decoding settings as effects or as the default settings always used with a specific camera, so they are easily applied to newly imported images. For more information about saving your custom RAW Fine Tuning settings as the default for a specific camera, see [Setting the Camera Default](#) on page 294.

If the RAW Fine Tuning controls do not appear, the selected photo is from a previous version of Aperture. You must first reprocess the image using the most current RAW image processing. For more information, see [An Overview of Reprocessing Photos](#) on page 76.



Using the Boost Controls

OS X characterizes each digital camera's RAW file format to determine an optimal contrast setting. The Boost controls allow you to set the strength of the contrast when the RAW file is decoded. The Hue Boost controls are used to maintain the hues in the image as the contrast is increased using the Boost controls. When the Hue Boost parameter is set to 1.00 and the Boost parameter is set to 1.00, the hues of the primary and secondary colors are pinned to their pure color values, resulting in a shift of all the hues in the image.

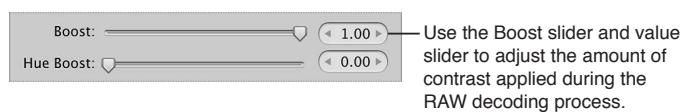
For images that consist of saturated primary and secondary colors, such as an image of flowers in a lush garden, shifting the hues to their true values has a desirable visual effect. However, this is not visually desirable for images containing skin tones. Shifting the hues most often causes the skin to appear yellow. Setting the Hue Boost parameter to 0.00 increases the color contrast in the image while preserving the original hues in the image.

To adjust the strength of the contrast applied during the RAW decoding process

- 1 Select a RAW image.

Note: If the RAW Fine Tuning controls do not appear in the Adjustments inspector or the Adjustments pane of the Inspector HUD, the selected image is from a previous version of Aperture. You must first reprocess the image using the most current RAW image processing. For more information, see [An Overview of Reprocessing Photos](#) on page 76.

- 2 In the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Boost parameter using the Boost slider and value slider.



A value of 0.00 applies no contrast adjustment to the image during the RAW decoding process. A value greater than 0.00 increases the contrast adjustment to the image. A value of 1.00 applies the full Apple-recommended contrast adjustment for the specific camera model.

- 3 Adjust the Hue Boost parameter using the Hue Boost slider and value slider.



A value of 0.00 preserves the original hues in the image in relation to the Boost adjustment (color contrast) during the RAW decoding process. A value greater than 0.00 increases the hue adjustment to the image. A value of 1.00 applies the full Apple-recommended hue adjustment for the specific camera model.

Using the Sharpening Controls

You can adjust sharpening during the RAW decoding process by using the RAW Fine Tuning Sharpening controls in the Adjustments inspector or the Adjustments pane of the Inspector HUD.

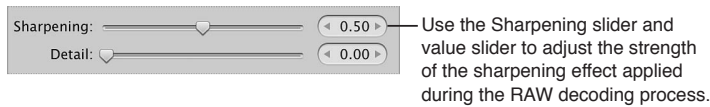
Note: The effect of sharpening an image or group of images using the RAW Fine Tuning adjustment is very subtle. More sharpening effects can be obtained using the Edge Sharpen adjustment. For more information about the Edge Sharpen adjustment, see [Working with the Edge Sharpen Controls](#) on page 385.

To adjust the amount of sharpening applied during the RAW decoding process

- 1 Select a RAW image.

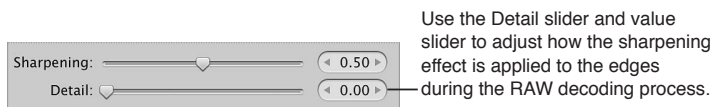
Note: If the RAW Fine Tuning controls do not appear in the Adjustments inspector or the Adjustments pane of the Inspector HUD, the selected image is from a previous version of Aperture. You must first reprocess the image using the most current RAW image processing. For more information, see [An Overview of Reprocessing Photos](#) on page 76.

- 2 Adjust the strength of the sharpening effect using the Sharpening slider and value slider.



A value of 0.00 applies no sharpening effect to the image during the RAW decoding process. A value greater than 0.00 increases the sharpening effect to the image.

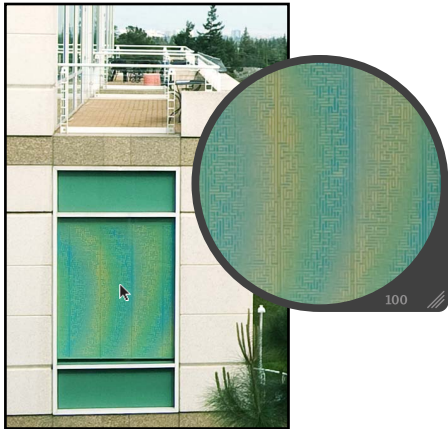
- 3 Adjust how the sharpening effect is applied to edges using the Detail slider and value slider.



A value greater than 0.00 intensifies the sharpening effect on hard edges.

Using the Moire Controls

Digital images often have color artifacts that appear around edges and lines because of noise created by digital image sensors. Images whose subjects have linear patterns often introduce a moire pattern that gives the subject a wrinkled or rainbow-colored appearance. In addition, cameras with image sensors employing Bayer patterns often introduce noise into monochromatic images. The Moire adjustment controls in the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD identify these patterns and correct these artifacts.



Because many digital cameras have weak anti-aliasing filters, the Moire and Radius parameters are specifically used to correct aliasing in an image caused by edges with high color contrast. Weak anti-aliasing filters tend to curve edges, skewing the colors in the process. During the RAW decoding process, OS X scans for high-frequency information in the RAW file, looking for blended colors, and then replaces the blended colors with the edge colors that originally existed in the scene. The Moire parameter adjusts the amount of signal to apply the adjustment to. The Radius parameter adjusts the pixel area (visual threshold) the adjustment is applied to.

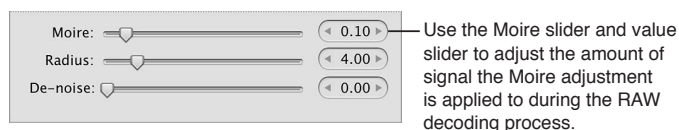
Note: The Moire controls replace the Chroma Blur controls found in previous versions of Aperture.

To adjust the amount of moire reduction applied during the RAW decoding process

- 1 Select a RAW image.

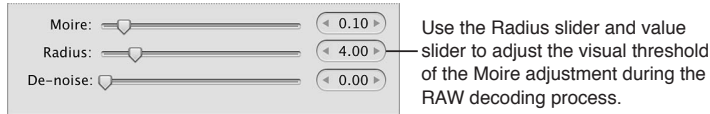
Note: If the RAW Fine Tuning controls do not appear in the Adjustments inspector or the Adjustments pane of the Inspector HUD, the selected image is from a previous version of Aperture. You must first reprocess the image using the most current RAW image processing. For more information, see [An Overview of Reprocessing Photos](#) on page 76.

- 2 Adjust the amount of signal to apply the Moire adjustment to using the Moire slider and value slider.



A value of 0.00 applies no moire correction during the RAW decoding process. A value greater than 0.00 applies moire correction during the RAW decoding process.

- 3 Adjust the pixel area (visual threshold) the Moire adjustment is applied to using the Radius slider and value slider.



A value of 0.10 is the most limited area over which the moire correction can be applied during the RAW decoding process. A value greater than 0.10 increases the area over which the moire correction is applied during the RAW decoding process.

- 4 If supported by the camera, reduce digital noise in the image using the De-noise slider and value slider.

A value greater than 0.00 reduces noise in the image.

Working with DNG Files

In Aperture, you can adjust how OS X decodes RAW images in the DNG format. If the digital camera that captured a photo is supported by Aperture, the calibration data for that camera is used to decode the RAW file in the same manner as if it were decoded from the RAW file format itself. If the DNG file is from an unsupported camera, Aperture uses the camera information stored in the DNG file to decode the image.

To adjust the RAW Fine Tuning parameters of a DNG file

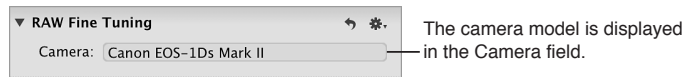
- 1 Select a DNG file imported with or reprocessed using Aperture 3 image processing.

Note: If the RAW Fine Tuning controls do not appear in the Adjustments inspector or the Adjustments pane of the Inspector HUD, the selected image is from a previous version of Aperture. You must first reprocess the image using Aperture 3 image processing. For more information, see [An Overview of Reprocessing Photos](#) on page 76.

- 2 Adjust the RAW Fine Tuning parameters as necessary for the image.

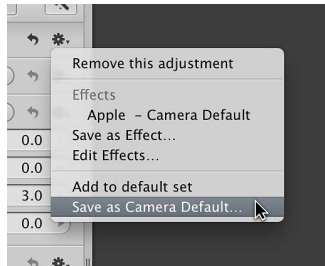
Setting the Camera Default

When you've modified the RAW decoding settings using the controls in the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, you can save these settings as the default parameter values for the camera model. All RAW image files from this camera model that are imported into Aperture are decoded using these saved settings.



To set the camera default

- 1 In the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Save as Camera Default from the Action pop-up menu (with a gear icon) for the RAW Fine Tuning adjustment.



The RAW Fine Tuning Adjustment Presets dialog appears.

- 2 Enter a name for the preset and click OK.

The Action pop-up menu for the RAW Fine Tuning adjustment displays the preset's name with a checkmark next to it.

To clear the camera default settings

You can always clear the saved camera default settings. To remove a RAW Fine Tuning adjustment preset from the list of camera default settings, you have to delete it.

- 1 In the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Apple from the Action pop-up menu (with a gear icon) to make it the camera default setting, then choose Edit Effects from the Action pop-up menu.

The RAW Fine Tuning Adjustment Presets dialog appears.

- 2 Select the RAW Fine Tuning preset you want to remove, then press the Delete key.
- 3 In the dialog that appears, click the Delete Adjustment Presets button.

The adjustment preset is removed from the RAW Fine Tuning Adjustment Presets dialog, and the adjustment preset no longer appears in the RAW Fine Tuning Action pop-up menu.

To use the Apple-recommended camera default settings

- In the RAW Fine Tuning area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Apple from the Action pop-up menu (with a gear icon).

A checkmark appears next to Apple in the Action pop-up menu.

Working with iPhoto Effects

If you prefer working with iPhoto effects, you can apply them to your images directly in Aperture. If you've applied an effect in iPhoto, such as a Matte effect or an Antique effect, you can adjust the effect's parameters in Aperture as well.

To apply an iPhoto effect to an image

- 1 Select an image.
- 2 Choose iPhoto Effects from the Add Adjustment pop-up menu in the Adjustments inspector or the Adjustments pane of the Inspector HUD.

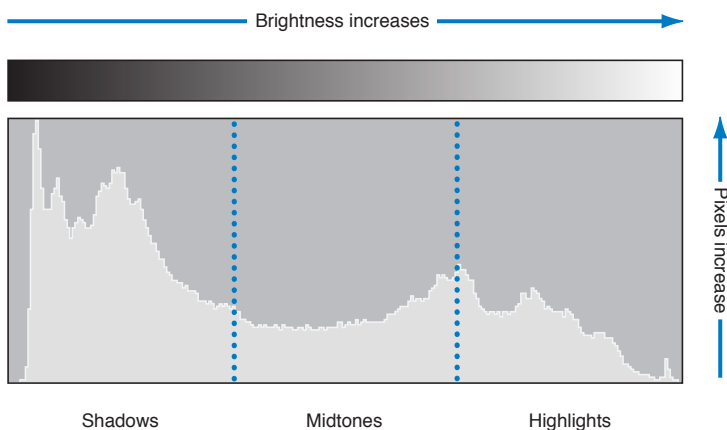


- 3 Do either or both of the following:
 - *To apply the Black & White, Sepia, or Antique effect to the image:* Choose an option from the Effect pop-up menu.
The Amount slider and value slider appear when you choose Antique from the Effect pop-up menu. Use the Amount controls to adjust the intensity of the Antique effect.
Note: The None option removes the Black & White, Sepia, or Antique effect.
 - *To apply the Matte, Vignette, Edge Blur, or Fade effect:* Drag the slider or use the value slider for the effect.

Understanding How to Read Histograms

An Overview of Histograms

The histogram is a graph that displays relative brightness in an image, from pure black to pure white. The area under the graph represents all the pixels in the image. From left to right, the histogram describes the range of dark pixels (shadows), gray pixels (midtone), and bright pixels (highlights) in the image. The shape of the histogram graph depends on the tonality of the scene and the exposure.

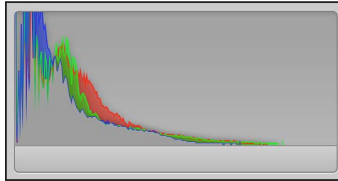


A histogram can also be used as a tool to evaluate whether or not there is enough shadow, midtone, and highlight information in the image. Aperture provides three histograms in the Adjustments inspector and the Adjustments pane of the Inspector HUD. The histogram above the adjustment controls indicates the current state of the image. The Levels histogram included with the Levels adjustment controls provides a way to adjust the brightness values in the image in relation to the displayed histogram. You use the Levels controls to adjust the shadow, dark quarter-tone, midtone, light quarter-tone, and highlight values independently of each other without affecting the other areas of the image. The Curves histogram included with the Curves adjustment controls provides a way to adjust the tonal values in the image in relation to the displayed histogram. You use the Curves controls to adjust the full range of tonal values independently of each other without affecting the other areas of the image.

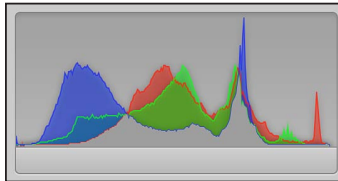
For more information about performing a Levels adjustment, see [An Overview of the Levels Adjustment](#) on page 367. For more information about performing a Curves adjustment, see [An Overview of the Curves Adjustment](#) on page 350.

Evaluating Exposure

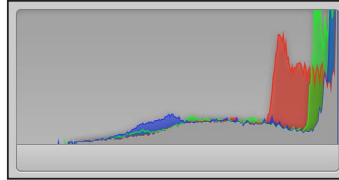
Histograms are good tools for evaluating exposure. For example, a series of peaks in the darker side of the histogram often indicates an underexposed image that consists mainly of dark pixels.



A series of peaks in the center of the histogram often indicates a balanced exposure because a majority of the pixels are concentrated within the midtones of the histogram. They're not too dark or too bright.

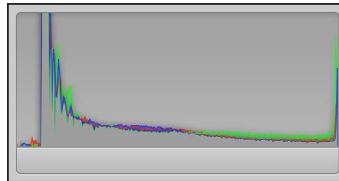


However, a series of peaks in the brighter side of the histogram often indicates an overexposed image because most of the pixels in the image are too bright.

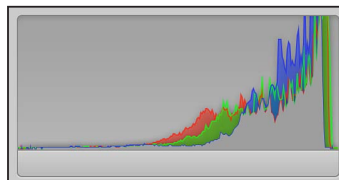


Evaluating Tonality and Contrast

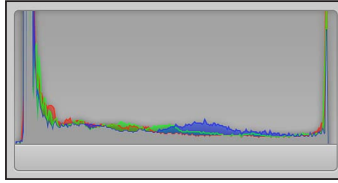
Although histogram graphs are good tools for evaluating an image's exposure, you shouldn't interpret histograms for exposure information only, because the shape of the histogram is also influenced by the tonality in the scene. You need to take the subject of the image into account when evaluating its histogram. For example, images shot at night are naturally going to have a majority of peaks in the darker side of the histogram.



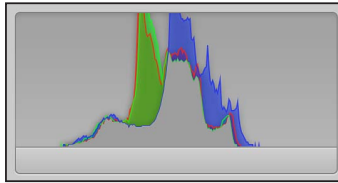
Likewise, images of bright scenes, such as snow or light reflecting off the ocean, have a majority of their peaks in the brighter side of the histogram.



Histograms can also depict contrast in an image. For example, this silhouette of the man in the hammock in front of the sunset consists of a relatively even assortment of extreme bright and dark tonal values with few midtones. In this case, the histogram is shaped like a valley with peaks in both the dark and bright sides.



Likewise, histograms can also depict a lack of contrast in an image. For example, an image of a rainbow in the fog lacks contrast. Without directional lighting, there aren't any highlights or shadows in the image. In this case, the peaks of the histogram are concentrated in the center and do not come close to either the dark or bright sides.



About Making Adjustments Onscreen

Human eyes perceive color subjectively. It's difficult to make objective changes to the colors in an image because the brain is so advanced that it skews the perception of colors to make them appear as natural as possible. For this reason, it is essential that you create the best possible work environment for performing color adjustments. Such an environment excludes extraneous colors that have the potential to throw off your eye.

Before you begin making color adjustments to your images, it's important to pay attention to the following:

- Set your display to its highest-resolution setting. This will give you the best view of your image.
- Make sure you are employing good color management. This means that your displays and printers are calibrated and their profiles are up to date.
- Reduce the ambient light in the room you are working in to prevent the light from skewing your perception of the colors on your screens, and make sure your displays are set to their brightest levels.
- If possible, paint the walls in the room in which you perform detailed image adjustments a neutral gray. Keep bright-colored objects to a minimum to ensure that the colors on your screens are not altered by the color in the rest of the room.

Working with the Auto Enhance Button

You use the Auto Enhance button when you want to quickly improve your image or preview what the image will look like when adjusted. When you click the Auto Enhance button, Aperture evaluates the image and then applies the White Balance, Enhance, Curves, and Highlights & Shadows adjustment settings in a manner that suits the selected photo. Using Auto Enhance is a good starting point when adjusting an image because you can always fine-tune the parameter settings for each adjustment.



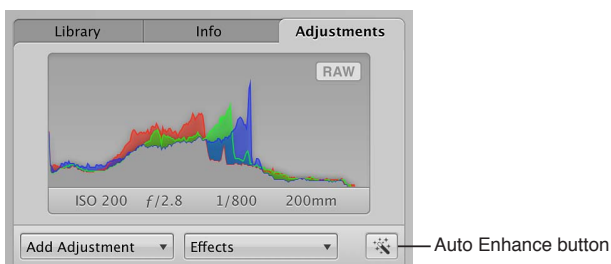
Before Auto Enhance adjustment



After Auto Enhance adjustment

To automatically enhance an image

- 1 Select a photo.
- 2 At the top of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the Auto Enhance button.



To fine-tune the White Balance, Enhance, Curves, and Highlights & Shadows parameter settings applied by the Auto Enhance adjustment, see the following sections:

- [An Overview of the White Balance Adjustment](#) on page 330
- [An Overview of the Enhance Adjustment](#) on page 340
- [An Overview of the Curves Adjustment](#) on page 350
- [An Overview of the Highlights & Shadows Adjustment](#) on page 363

Working with the Retouch Controls

An Overview of the Retouch Adjustment Controls

You use the Retouch brushes to touch up imperfections in the image caused by sensor dust, image artifacts, and other environmental conditions. You can also copy an element of an image and paste it in another area for purely aesthetic reasons. Aperture provides two methods for retouching your images. The method you use depends on whether you are trying to copy texture from the source while preserving hard edges at the destination (where the blemish is) or simply copy pixels from one area of the image and replace them over another.

If the area you need to repair has a hard edge near the problem area, you use the “repair” method. You also use the repair method when you want to copy high-frequency texture from one area of the image (the source) and brush the texture over the destination area while maintaining the underlying color and shading of the destination area.

The second method, “cloning,” is used when you simply want to copy pixels from one area and paste them on another area. Cloning is useful when you want to copy an element of an image as is (a cloud, for example) and paste it in another area.

Which Retouching Adjustment Should You Use?

Aperture provides two sets of controls that you can use to retouch your image: Retouch and Spot & Patch.

In the vast majority of cases, Retouch provides the controls that will best serve your image-repair needs. The Spot & Patch controls have been included in Aperture 3 in order to retain the integrity of images that were adjusted with earlier versions of Aperture. In many cases, image repairs might even be improved by removing an existing Spot & Patch repair and replacing it with a Repair or Clone adjustment performed with the Retouch tool.

There are certain situations in which Spot & Patch is the adjustment of choice. For example, an artifact on or very near a curved edge in an image may be more effectively removed using the Angle parameter. For more information about the Spot & Patch adjustment controls, see [Spotting Your Images](#) on page 310.

Repairing Your Images

You use the Repair brush of the Retouch adjustment when the area surrounding the blemish has elements of high contrast, such as an edge, or when you need to copy texture from the source area and maintain the color and shading in the destination area.



Before Repair adjustment

After Repair adjustment

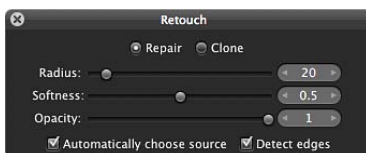
To retouch an image using the Repair brush

- 1 Select a photo.
- 2 To display the photo at full size, click the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or press Z).

Setting the photo to appear at full size (100 percent) prevents image scaling from obscuring details.

- 3 Choose Retouch from the Quick Brush pop-up menu (with a brush icon) in the tool strip or the Full Screen view toolbar.

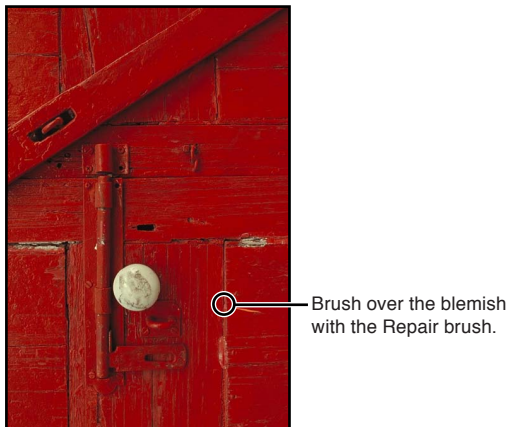
The pointer changes to a brush, and the Retouch HUD appears.



- 4 In the Retouch HUD, do the following:
 - a Click the Repair button.
 - b Set the radius of the brush by dragging the Radius slider, entering a value in the Radius value slider, or using the scroll gesture.

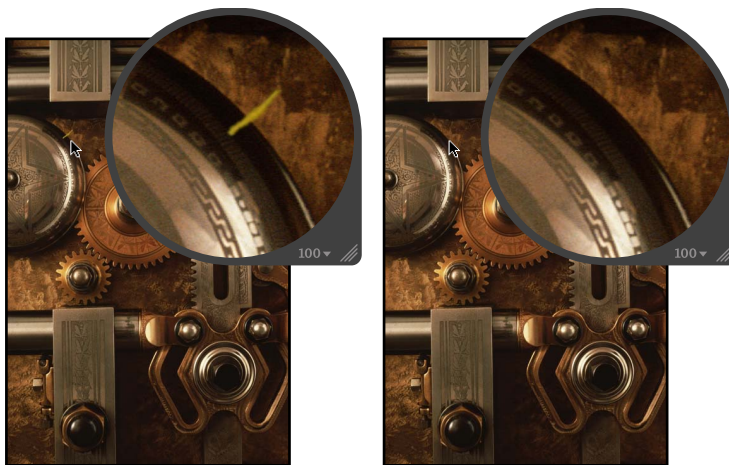
Note: You cannot use the scroll gesture when the pointer is placed over the Retouch HUD.
 - c Set the softness of the brush by dragging the Softness slider or entering a value in the Softness value slider.
 - d Set the opacity of the brush by dragging the Opacity slider or entering a value in the Opacity value slider.
- 5 If you want the Retouch adjustment to preserve edge details in the image, select the “Detect edges” checkbox.

- 6 If you need to copy pixels from another area of the image, deselect the “Automatically choose source” checkbox, and Option-click the source area.
- 7 Brush over the area with the imperfection.



Cloning Your Images

You use the Clone brush of the Retouch adjustment to copy pixels from an area of the image with similar visual elements and paste the pixels over the area with the imperfection. No pixels are blended from the area surrounding the brush stroke.



Before Clone adjustment

After Clone adjustment

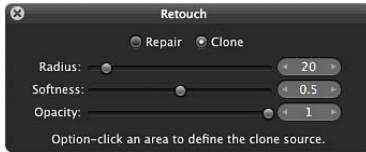
To retouch an image using the Clone brush

- 1 Select a photo.
- 2 To display the photo at full size, click the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or press Z).

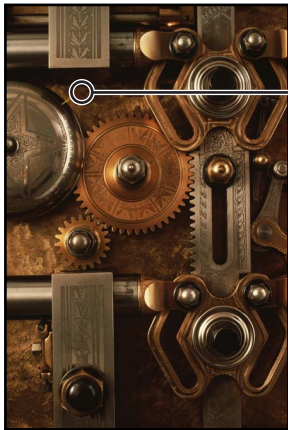
Setting the photo to appear at full size (100 percent) prevents image scaling from obscuring details.

- 3 Choose Retouch from the Quick Brush pop-up menu (with a brush icon) in the tool strip or the Full Screen view toolbar.

The pointer changes to a brush, and the Retouch HUD appears.



- 4 In the Retouch HUD, do the following:
 - a Click the Clone button.
 - b Set the radius of the brush by dragging the Radius slider or entering a value in the Radius value slider.
 - c Set the softness of the brush by dragging the Softness slider or entering a value in the Softness value slider.
 - d Set the opacity of the brush by dragging the Opacity slider or entering a value in the Opacity value slider.
- 5 Option-click the source area (the area where you want to copy the pixels).
- 6 Brush over the area with the imperfection.



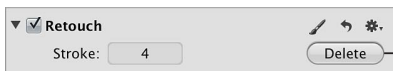
Brush over the blemish with the Clone brush.

Deleting Retouch Brush Strokes

You can delete a Retouch brush stroke at any time. Because pixels in brush strokes are sampled sequentially, brush strokes can be deleted only in reverse order.

To delete a brush stroke

- 1 Click the Delete button in the Retouch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.



Click the Delete button to remove a brush stroke.

- 2 Repeat step 1 until the brush stroke you want to remove is deleted.

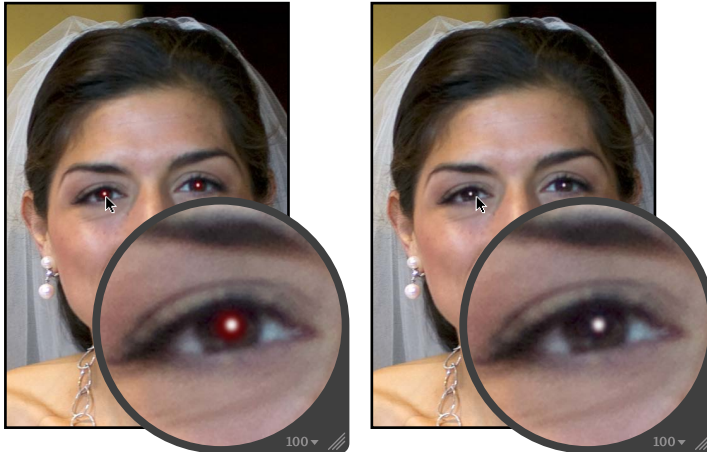
To delete all brush strokes at one time

- Click the Reset button (a curved arrow) in the Retouch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.

Working with the Red Eye Correction Controls

An Overview of the Red Eye Adjustment

You use the Red Eye tool and the Red Eye Correction adjustment controls to reduce the red-eye effect in the eyes of the subjects in your image. You use the Red Eye tool to place targets on the red eyes of the subjects in the image, and then you can adjust the radius and sensitivity of the target overlays using the Red Eye Correction controls. Aperture desaturates the red pixels within the target overlay area, reducing the effect.



Before Red Eye adjustment

After Red Eye adjustment

Reducing Red-Eye Using the Red Eye Tool

Reducing red-eye in the eyes of the subjects in your image is as simple as targeting the red eyes with the Red Eye tool.

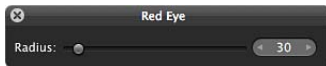
To remove red-eye with the Red Eye tool

- 1 Select a photo.
- 2 To display the photo at full size, click the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or press Z).

Setting the photo to appear at full size (100 percent) prevents image scaling from obscuring details.

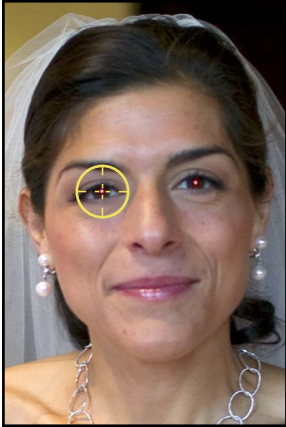
- 3 Select the Red Eye tool in the tool strip or the Full Screen view toolbar (or press E).

The pointer changes to a target, and the Red Eye HUD appears.



- 4 Click a red eye in the image to place a Red Eye target overlay on it.

The Red Eye target overlay is placed over the red eye, and the red pixels within the Red Eye target overlay are desaturated.



- 5 Repeat step 4 until all of the red eyes in your image are corrected.

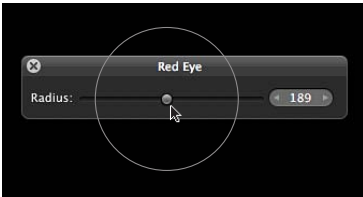
Adjusting the Size of Red Eye Target Overlays

Aperture fixes red-eye in your images by desaturating the red pixels within the Red Eye target overlay area. It's a good idea to fit each Red Eye target overlay to the size of the eye it covers. This prevents any red pixels in the skin around your subject's eyes or in clothing, such as a scarf or hat, from being affected by the red-eye adjustment. You may also need to increase the size of a Red Eye target overlay to completely encompass the eye you are targeting if the image is a close-up. You can adjust the size of a Red Eye target overlay before and after it's placed on the image.

To change the size of the Red Eye tool's target

Do one of the following:

- Drag the Radius slider in the Red Eye HUD.



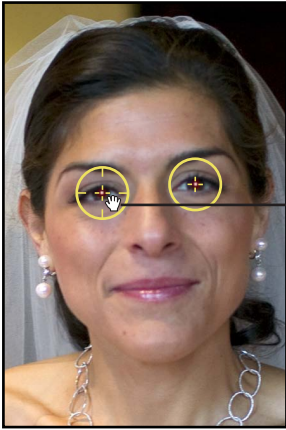
- Use the scroll gesture.

The size of the Red Eye tool's target changes.

To change the size of an existing Red Eye target overlay

- 1 Display the image at full size (100 percent) by clicking the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or pressing Z).
- 2 Click the Red Eye target overlay to select it.

A hand icon appears to indicate that you can select the Red Eye target overlay.



The Red Eye tool changes to a hand icon to indicate that you can select the Red Eye target overlay.

- 3 In the Red Eye Correction area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Radius parameter by doing one of the following:
- Drag the Radius slider.
 - Click the left or right arrow in the Radius value slider to change the size of the Red Eye target overlay by single increments, or drag in the value field.
 - Double-click the number in the Radius value slider, then enter a value from 3.00 to 400.00.

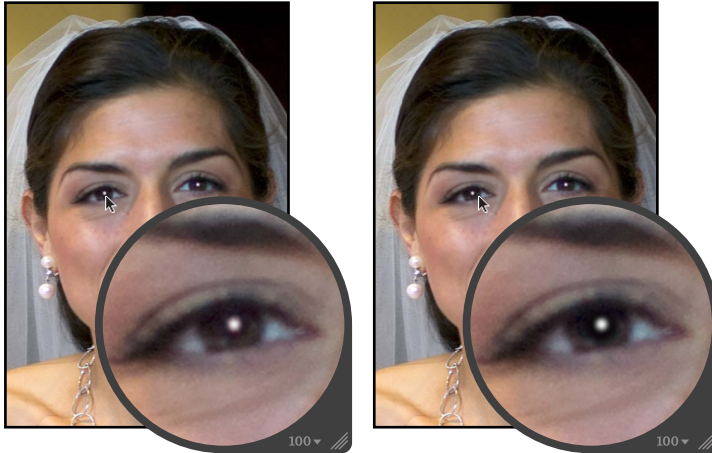


Drag the Radius slider to adjust the size of the selected Red Eye target overlay.

The size of the Red Eye target overlay increases as the parameter value increases.

Adjusting the Sensitivity of Red Eye Target Overlays

When you target a red eye in a picture, Aperture automatically chooses the area within the target overlay circle where the desaturation is applied. In a few cases, the area chosen by Aperture might be either slightly too large or slightly too small (typically including a few pixels in the eyelid skin, or missing a few red pixels inside the pupil). For these difficult cases, you can adjust the Sensitivity parameter to change the area where desaturation occurs. For example, dragging the Sensitivity slider to the left by one notch decreases the radius of the active area within the Red Eye target overlay by one pixel, and dragging the Sensitivity slider one notch to the right enlarges it by one pixel.



Before Sensitivity adjustment
(the eyelids are desaturated)

After Sensitivity adjustment

To adjust the sensitivity of a Red Eye target overlay

- 1 Click the Red Eye target overlay to select it.
- 2 In the Red Eye Correction area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Sensitivity parameter by doing one of the following:
 - Drag the Sensitivity slider.
 - Click the left or right arrow in the Sensitivity value slider to change the sensitivity of the Red Eye target overlay by single-pixel increments, or drag in the value field.
 - Double-click the number in the Sensitivity value slider, then enter a value from -10.00 to 10.00 and press Return.



Use the Sensitivity slider and value slider to fine-tune the area within the Red Eye target overlay where desaturation occurs.

The area within the Red Eye target overlay where desaturation occurs increases as the parameter value increases.

Viewing the Corrected Image Without Red Eye Target Overlays

After correcting the red eyes in your image, you can view the corrected image with the Red Eye target overlays turned off.

To view the corrected image with the Red Eye target overlays turned off

- Select the Selection tool in the tool strip or the Full Screen view toolbar (or press A).

The Red Eye target overlays disappear, but the effect of the Red Eye adjustment remains visible.

Note: You can still make adjustments to the targeted red eyes with the overlays turned off, and the image is updated to show the changes.

To turn the Red Eye target overlays on again

Do one of the following:

- Select the Red Eye tool in the tool strip or the Full Screen view toolbar (or press E).
- In the Red Eye Correction area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the Red Eye Tool button (with an icon of a red eye).

The Red Eye target overlays reappear.

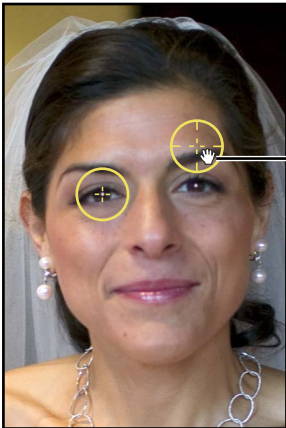
Moving Red Eye Target Overlays

Once placed, a Red Eye target overlay can always be moved.

To move a Red Eye target overlay

- 1 Make sure the Red Eye tool is selected, then place the Red Eye tool's target over the Red Eye target overlay you want to move until the target changes to a hand icon.

The hand icon indicates that you can drag the target overlay rather than place a new one.



Drag the Red Eye target overlay over the red eye in the image.

- 2 Drag the Red Eye target overlay to the appropriate position over the subject's eye.

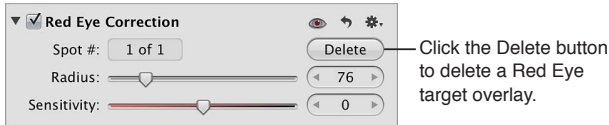
Deleting Red Eye Target Overlays

You can always delete a Red Eye target overlay.

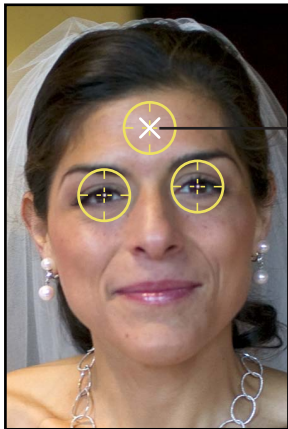
To delete a Red Eye target overlay

Do one of the following:

- Select a Red Eye target overlay in the image, then click the Delete button in the Red Eye Correction area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.



- Command-click a Red Eye target overlay.



The Red Eye target overlay disappears.

Working with the Spot & Patch Controls

An Overview of the Spot & Patch Adjustment

You use the Spot & Patch adjustment controls when you need to modify Spot & Patch parameter settings that were applied using previous versions of Aperture. When using the Spot & Patch adjustment to spot or patch your images, you can modify the appearance of the pixels within the target overlays. You can also adjust the size of Spot & Patch target overlays.

Which Retouching Adjustment Should You Use?

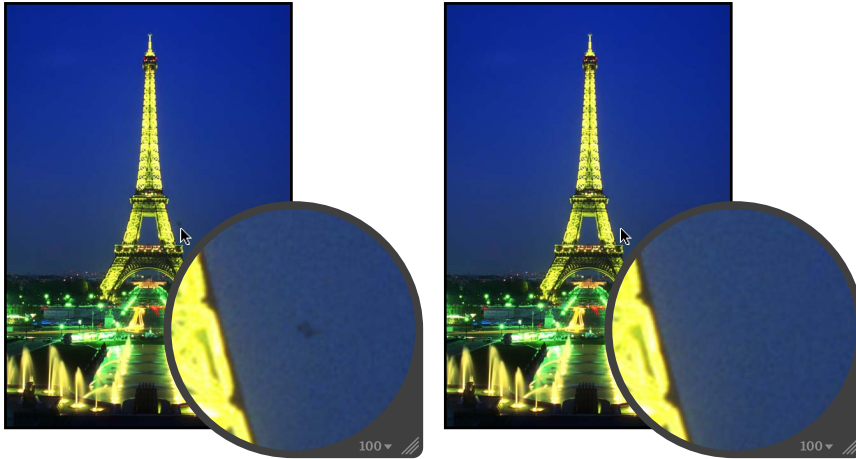
Aperture provides two sets of controls that you can use to retouch your image: Retouch and Spot & Patch.

In the vast majority of cases, Retouch provides the controls that will best serve your image-repair needs. The Spot & Patch controls have been included in Aperture 3 in order to retain the integrity of images that were adjusted with earlier versions of Aperture. In many cases, image repairs might even be improved by removing an existing Spot & Patch repair and replacing it with a Repair or Clone adjustment performed with the Retouch tool. For more information about the Retouch tool, see [An Overview of the Retouch Adjustment Controls](#) on page 300.

There are certain situations in which Spot & Patch is the adjustment of choice. For example, an artifact on or very near a curved edge in an image may be more effectively removed using the Angle parameter.

Spotting Your Images

When the area around the blemish is continuous (such as a solid color) and doesn't contain a distinct texture, you can use the spotting method to obscure the blemish by integrating the pixels that surround it. You fix a blemish by placing the Spot & Patch target overlay over the blemish in the image and then adjusting the size of the target overlay so that it just barely covers the blemish. By keeping the target overlay small, you minimize the chance of a visual aberration in the final image. Aperture provides additional parameter controls to allow you to adjust the softness, opacity, and amount of detail in the cloned pixels, so that the corrected area looks as natural as possible.



Before Spot & Patch adjustment
(spotting)

After Spot & Patch adjustment
(spotting)

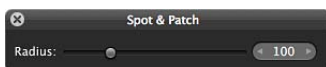
To spot an image

- 1 Select a photo.
- 2 To display the photo at full size, click the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or press Z).

Setting the photo to appear at full size (100 percent) prevents image scaling from obscuring details.

- 3 Choose Spot & Patch from the Add Adjustment pop-up menu in the Adjustments inspector or the Adjustments pane of the Inspector HUD.

The pointer changes to a target, and the Spot & Patch HUD appears.



- 4 Click the blemish area to place the Spot & Patch target overlay on it.

The yellow Spot & Patch target overlay is placed over the blemish, and the blemish disappears.



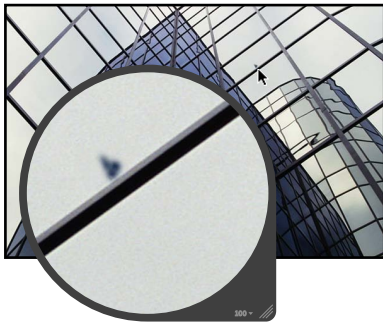
Click a blemish to place a Spot & Patch target overlay on it.

Note: You can always adjust the size of the target overlay and other parameters. For more information, see [Adjusting the Size of Spot & Patch Target Overlays](#) on page 314.

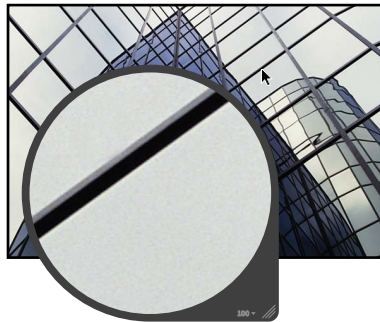
- 5 Repeat step 4 until all of the blemishes in your image are removed.

Patching Your Images

When you need to clone pixels from a different area of an image to fix the area where the blemish is, you use the “patching” method. Patching is similar to spotting, except that there are some additional steps. You first place a Spot & Patch target overlay (yellow) over the blemish, and then you place a source target overlay (white) over the area you want to clone. The pixels in the Spot & Patch target overlay are replaced by the pixels copied from the source target overlay. Aperture provides additional parameter controls to allow you to adjust the size of target overlays and the softness, opacity, and amount of detail in cloned pixels, so that the patched area looks as natural as possible.



Before Spot & Patch adjustment
(patching)



After Spot & Patch adjustment
(patching)

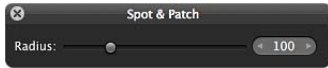
To patch a blemish in an image

- 1 Select a photo.
- 2 To display the photo at full size, click the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or press Z).

Setting the photo to appear at full size (100 percent) prevents image scaling from obscuring details.

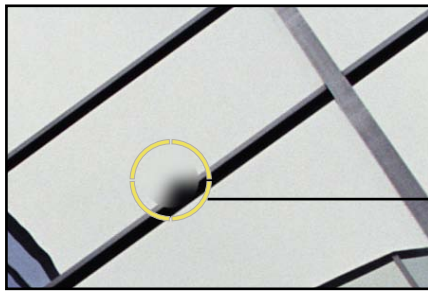
- 3 Choose Spot & Patch from the Add Adjustment pop-up menu in the Adjustments inspector or the Adjustments pane of the Inspector HUD.

The pointer changes to a target, and the Spot & Patch HUD appears.



- 4 Click the blemish area to place a Spot & Patch target overlay on it.

A yellow target overlay is placed over the blemish, and the blemish is replaced by the pixels that surround it. This yellow target overlay is the destination target overlay.

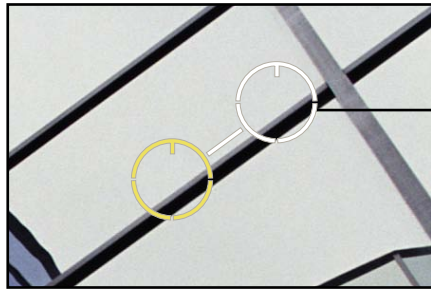


Click a blemish to place a Spot & Patch target overlay on it.

- 5 Do one of the following:

- Select the Patch checkbox in the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, then drag the white source target overlay to the area you want to clone (the source area).
- Option-click the area you want to clone.

A white source target overlay appears and is placed over the source area.



Option-click the area you want to clone to place a source target overlay on it.

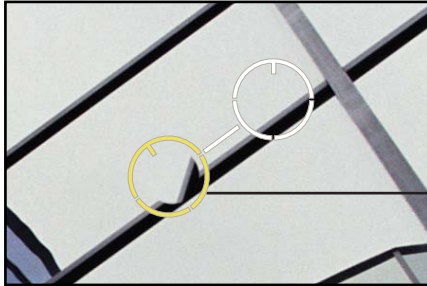
The pixels within the source target overlay are copied and replace the pixels within the destination target overlay. The blemish is patched.

Note: You can always adjust the size of the target overlay and other parameters. For more information, see [Adjusting the Size of Spot & Patch Target Overlays](#) on page 314.

- Repeat steps 4 and 5 until all blemishes are removed from your image.

To adjust the angle of the cloned pixels within a destination target overlay

Adjusting the angle of the cloned pixels within the destination target overlay rotates the cloned pixels over the destination area. This is particularly useful if you're cloning an area that has a visual element, such as a pattern or line, that is at a different angle from elements in the destination area. The Angle controls allow you to match the angle of the pixels within the destination target overlay.



You can adjust the angle of the cloned pixels.

In the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Angle parameter by doing one of the following:

- Drag the Angle slider to the left to rotate the cloned pixels counterclockwise, or drag the Angle slider to the right to rotate the cloned pixels clockwise.
- Click the left or right arrow in the Angle value slider, or drag in the value field.
- Double-click the number in the Angle value slider, then enter a value from -180.00 to 180.00 and press Return.



Use the Angle slider and value slider to adjust the angle of the pixels in the destination target overlay.

A negative value rotates the cloned pixels counterclockwise, and a positive value rotates the cloned pixels clockwise.

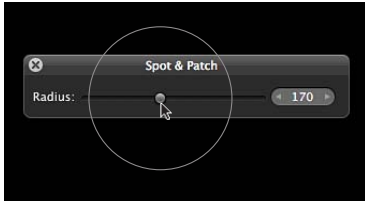
Adjusting the Size of Spot & Patch Target Overlays

You can change the size of a Spot & Patch target overlay before and after it's placed on an image. It's best to adjust the size of the target overlay so it fits the area around the blemish as tightly as possible. A tight fit ensures that any visual aberrations are minimal.

To change the size of the Spot & Patch target before placing it on the image

Do one of the following:

- Drag the Radius slider in the Spot & Patch HUD.



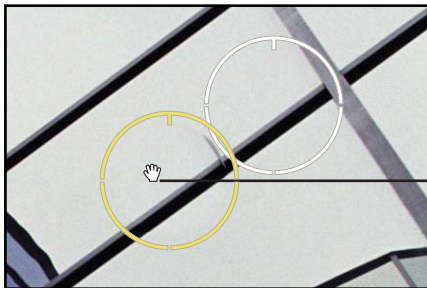
- Click the left or right arrow in the Radius value slider, or drag in the value field.
- Double-click the number in the Radius value slider, then enter a value from 3 to 400 and press Return.
- Use the scroll gesture.

The size of the Spot & Patch target changes.

To change the size of an existing Spot & Patch target overlay

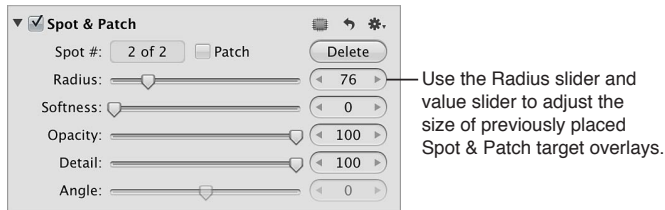
- 1 Display the image at full size (100 percent) by clicking the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or pressing Z).
- 2 Click a Spot & Patch target overlay to select it.

A hand icon appears to indicate that you can select the Spot & Patch target overlay rather than place a new one.



A hand icon appears to indicate that you can move the target overlay.

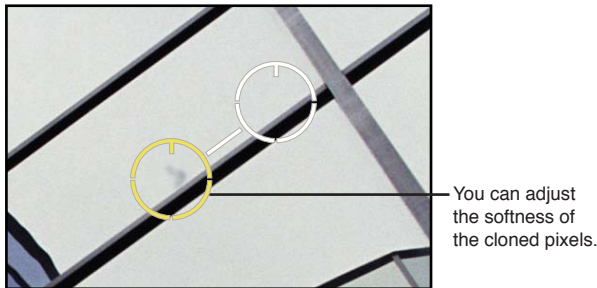
- In the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Radius parameter by doing one of the following:
 - Drag the Radius slider.
 - Click the left or right arrow in the Radius value slider to change the radius of the Spot & Patch target overlay by single-pixel increments, or drag in the value field.
 - Double-click the number in the Radius value slider, then enter a value from 3 to 400 and press Return.



The size of the Spot & Patch target overlay increases as the parameter value increases.

Adjusting the Softness Within Spot & Patch Target Overlays

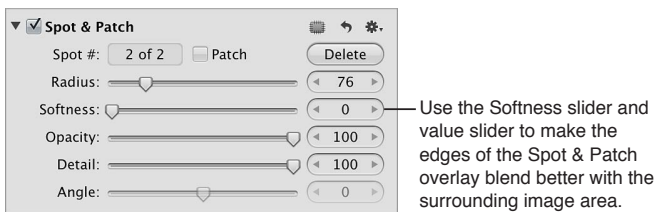
You can also change the “softness” of cloned pixels within Spot & Patch target overlays. Softness describes how well the area within the target overlay blends in with the surrounding image area. The Softness parameter controls the blending of pixels between the center of the Spot & Patch target overlay and the circumference. The higher the Softness parameter value, the closer to the center the pixel blending occurs. The lower the parameter value, the less pixel blending occurs, resulting in a “hard edge.”



To adjust the softness of pixels within a Spot & Patch target overlay

In the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Softness parameter by doing one of the following:

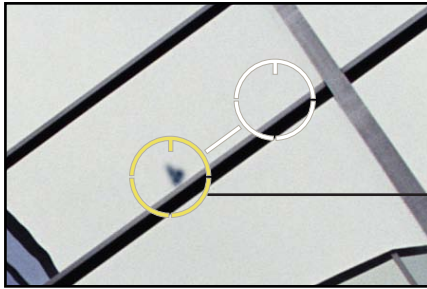
- Drag the Softness slider.
- Click the left or right arrow in the Softness value slider, or drag in the value field.
- Double-click the number in the Softness value slider, then enter a value from 3 to 400 and press Return.



A low value decreases the softness of pixels within the Spot & Patch target overlay, and a high value increases the softness.

Adjusting the Opacity Within Spot & Patch Target Overlays

Another method of modifying Spot & Patch target overlays to make cloned pixels blend in better with surrounding pixels is to adjust the opacity of pixels in the target overlay. The higher the Opacity parameter value, the more the cloned pixels obscure the original pixels they cover.



You can adjust the opacity of the cloned pixels.

To adjust the opacity of cloned pixels in a Spot & Patch target overlay

In the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Opacity parameter by doing one of the following:

- Drag the Opacity slider.
- Click the left or right arrow in the Opacity value slider, or drag in the value field.
- Double-click the number in the Opacity value slider, then enter a value from 0 to 100 and press Return.

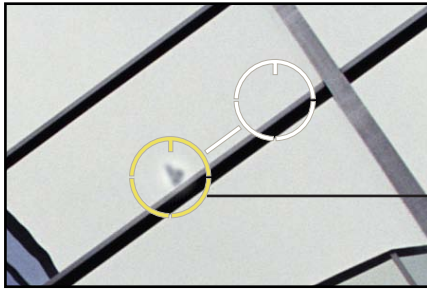


Use the Opacity slider and value slider to adjust the opacity of the cloned pixels in the target overlay.

A low value decreases the opacity of the cloned pixels in the Spot & Patch target overlay, and a high value increases the opacity.

Adjusting the Detail Within Spot & Patch Target Overlays

In addition to adjusting softness and opacity in Spot & Patch target overlays, you can adjust the amount of detail, such as texture or grain, that is preserved in the cloned pixels.



You can adjust the amount of detail in the cloned pixels.

To adjust the amount of detail in cloned pixels in a Spot & Patch target overlay

In the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Detail parameter by doing one of the following:

- Drag the Detail slider.
- Click the left or right arrow in the Detail value slider, or drag in the value field.
- Double-click the number in the Detail value slider, then enter a value from 0 to 100 and press Return.



Use the Detail slider and value slider to adjust the amount of detail in the cloned pixels in the target overlay.

A low value decreases the amount of detail, such as texture or grain, preserved in the cloned pixels, and a high value increases the amount of detail.

Viewing the Corrected Image Without Spot & Patch Target Overlays

After retouching the blemishes in your image, you can view the corrected image with the Spot & Patch target overlays turned off.

To view the corrected image with the Spot & Patch target overlays turned off

- Select the Selection tool in the tool strip or the Full Screen view toolbar (or press A).

The Spot & Patch target overlays disappear, but the effects of the Spot & Patch adjustment remain visible.

To turn the Spot & Patch target overlays on again

- Click the Spot & Patch Tool button (with a patch icon) in the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.

The Spot & Patch target overlays reappear.

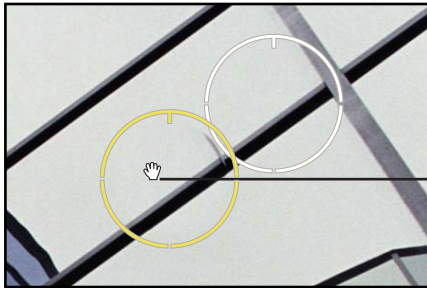
Moving Spot & Patch Target Overlays

Once placed, a Spot & Patch target overlay can always be moved.

To move a Spot & Patch target overlay

- 1 Make sure the Spot & Patch HUD is shown, then place the Spot & Patch target over the Spot & Patch target overlay you want to move until a hand icon appears.

The hand icon indicates that you can drag the target overlay rather than place a new one.



A hand icon appears to indicate that you can select the Spot & Patch target overlay.

- 2 Drag the Spot & Patch target overlay to the appropriate position on the image.

Deleting Spot & Patch Target Overlays

You can delete a Spot & Patch target overlay at any time.

To delete a Spot & Patch target overlay

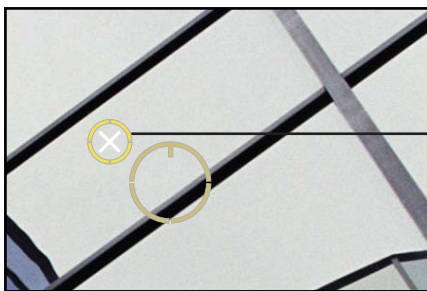
Do one of the following:

- Select a Spot & Patch target overlay in the image, then click the Delete button in the Spot & Patch area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.



Click the Delete button to delete a Spot & Patch target overlay.

- Command-click the Spot & Patch target overlay.



Command-click a Spot & Patch target overlay to delete it.

The Spot & Patch target overlay disappears.

Working with the Straighten Controls

An Overview of the Straighten Adjustment

When you shoot photos, environmental conditions often make it difficult to frame an image that is level in relation to the horizon—either real or virtual. In Aperture, you can straighten an image so that the horizon in the image is parallel to the bottom and top edges.



Before Straighten adjustment



After Straighten adjustment

You can use two different methods to straighten your images. You can use either the Straighten tool or the Straighten adjustment controls. However, you may find it most efficient to use the Straighten tool to quickly level the image so that it's roughly straight and then use the Straighten controls for more precision.

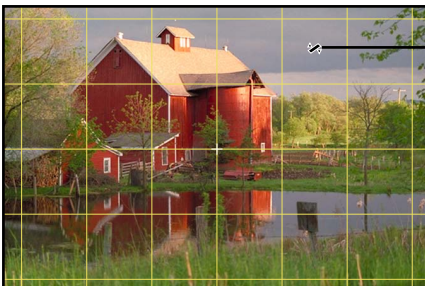
Rotating Images with the Straighten Tool

Rotating an image with the Straighten tool is as simple as selecting the tool and dragging within the image to make it straight. However, it's important to understand that although the image appears to enlarge as you rotate it, Aperture actually crops the image so that it fits within its rectangular border without blank edges appearing on the sides.

To straighten your image using the Straighten tool

- 1 Select a photo.
- 2 Select the Straighten tool in the tool strip or the Full Screen view toolbar (or press G).
The Selection tool changes to the Straighten tool.
- 3 With the Straighten tool selected, drag within the image to rotate it either clockwise or counterclockwise.

As you rotate the image, a yellow grid overlay appears to help you make the horizon perfectly straight, and the image is cropped to prevent gaps from appearing in the corners of the image.



Drag within the image to rotate it.

Note: It's a good idea to turn zooming off when straightening an image, so that the full image fits within the Viewer. If an image is zoomed in to its actual size, you can turn off zooming by clicking the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or by pressing Z).

Rotating Images with the Straighten Controls

You can also straighten an image using the Straighten adjustment controls. Using these controls provides more precision.

To straighten an image using the Straighten controls

- 1 Select the image.
- 2 If the Straighten controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Straighten from the Add Adjustment pop-up menu.
- 3 Change the value for the Angle parameter by doing one of the following:
 - Drag the Angle slider.
 - Click the left or right arrow in the Angle value slider, or drag in the value field.
 - Double-click the number in the Angle value slider, then enter a value from -20.0 to 20.0 degrees and press Return.



Decreasing the value rotates the image clockwise, and increasing the value rotates the image counterclockwise.

As you rotate the image, a yellow grid overlay appears to help you make the horizon perfectly straight, and the image is cropped to prevent gaps from appearing in the corners of the image.

Note: It's a good idea to turn zooming off when straightening an image, so that the full image fits within the Viewer. If an image is zoomed in to its actual size, you can turn off zooming by clicking the Zoom Viewer button in the tool strip or the Full Screen view toolbar (or by pressing Z).

Working with the Crop Controls

An Overview of the Crop Adjustment

You use the Crop tool and the Crop adjustment controls when you want to improve the composition of your image by trimming the edges, or when you want to change the aspect ratio of the image. For example, you can change an image's aspect ratio from 4 x 6 to 3 x 5.



Before Crop adjustment



After Crop adjustment

There are two methods for cropping an image: you can use the Crop tool to manually crop the image, or you can use the Crop adjustment controls. The method you choose is determined by the level of precision you require. The Crop tool provides a fast freehand method and works in conjunction with a Crop HUD that contains controls for setting the aspect ratio of the crop. The extra precision provided by the Crop adjustment controls is useful when you want to specify exact dimensions for the cropped image.

Cropping Images with the Crop Tool

Cropping an image with the Crop tool is the easiest method. You simply select the Crop tool and drag a rectangle over your image to exclude the unwanted areas. The Crop HUD appears, providing additional controls for setting the aspect ratio of the image and displaying cropping guides to help you visually align the composition of the image according to the rule of thirds.

To crop an image using the Crop tool

- 1 Select a photo.
- 2 Select the Crop tool in the tool strip or the Full Screen view toolbar (or press C).

The Selection tool changes to the Crop tool, and the Crop HUD appears.



- 3 With the Crop tool selected, drag a rectangle over the image to exclude the areas that you want to trim.

A Crop overlay appears on the image with resize handles, and the trimmed edges are dimmed.



Drag across the photo with the Crop tool. A dark overlay is placed over the trimmed areas.

- 4 Do any of the following:

- *To change the size and shape of a Crop overlay:* Drag a resize handle on the Crop overlay.



Drag a resize handle to resize the Crop overlay.

- *To adjust the placement of the crop on the image:* Drag the Crop overlay to the appropriate position.



Drag the Crop overlay to adjust its position.

- *To set the aspect ratio of the Crop overlay:* Choose an aspect ratio from the Aspect Ratio pop-up menu, or enter a custom aspect ratio by entering values in the Width and Height fields.



Choose a standard aspect ratio for the crop from the Aspect Ratio pop-up menu.

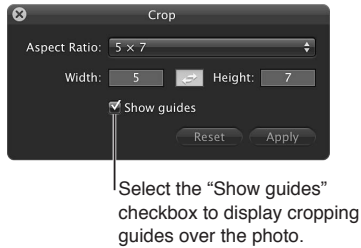
Note: Aperture interprets small (single- and double-digit) numbers as inches and larger numbers as pixels.

- *To change the orientation of the crop:* Click the Switch Aspect Ratio button.



The values in the Width and Height fields are reversed, and the Crop overlay is updated to show the new orientation. (Entering a number in the Width field that is smaller than the number in the Height field sets a portrait orientation. Entering a larger number in the Width field sets a landscape orientation.)

- *To show cropping guides within the Crop overlay:* Select the “Show guides” checkbox.



5 When you are satisfied with the composition of the crop, do one of the following:

- Click the Apply button in the Crop HUD.
- Click the close button (with an X) at the top-left corner of the Crop HUD.
- Select another tool in the tool strip or the Full Screen view toolbar. For example, select the Selection tool (or press A).

The cropped image appears in the Viewer. Select the Crop tool again (or press C) to make the trimmed edges visible in the Viewer again.

To remove the crop from an image

If you're unhappy with how an image is cropped, you can remove the Crop and start over.

- 1** Select the photo with the crop you want to reset.
- 2** In the tool strip, select the Crop tool.
- 3** Click the Reset button in the Crop HUD.

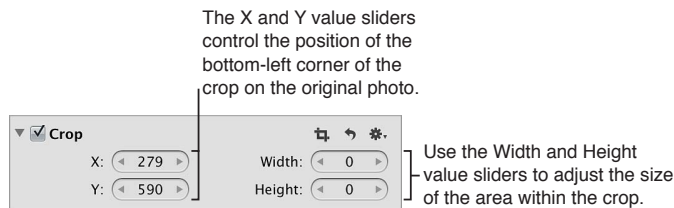
Cropping Images with the Crop Controls

You use the Crop adjustment controls when an extra level of precision is required. For example, if a client wants an image cropped to a precise dimension that is different from the standard aspect ratios, you use the Crop controls.

Aperture uses a simple coordinate system to position the Crop overlay on the image. You simply set x and y coordinates to specify the position of the bottom-left corner of the crop. The x-coordinate moves the bottom-left corner of the crop horizontally, and the y-coordinate moves the bottom-left corner of the crop vertically. Then you set the width and height to determine the area within the crop.

To set crop dimensions using the Crop adjustment controls

- 1 Select a photo.
- 2 If you wish, use the Crop tool to place a rough crop on the image.
- 3 If the Crop controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Crop from the Add Adjustment pop-up menu.
- 4 In the Crop area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the X value slider's left or right arrow, or double-click the number and enter a new number, to set the horizontal position of the bottom-left corner of the Crop overlay.



The X value is measured in pixels, and as the value increases, the Crop overlay moves to the right.

- 5 Specify the vertical position of the bottom-left corner of the crop using the Y value slider.

The Y value is measured in pixels, and as the value increases, the Crop overlay moves up.

- 6 Specify the width of the crop using the Width value slider.

The width is measured in pixels, and the measurement starts at the bottom-left corner, increasing from left to right.

- 7 Specify the height of the crop using the Height value slider.

The height is measured in pixels, and the measurement starts at the bottom-left corner, increasing from bottom to top.

- 8 To apply the crop to the image, press Return.

Working with the Flip Controls

You use the Flip adjustment controls when you want to flip the composition of the image vertically, horizontally, or both.



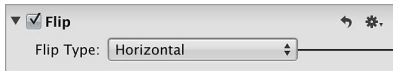
Before Flip adjustment



After Flip adjustment

To flip the composition of an image

- 1 Select a photo.
- 2 If the Flip controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Flip from the Add Adjustment pop-up menu.



Choose how you want to flip the photo from the Flip Type pop-up menu.

- 3 In the Flip area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, do any of the following:
 - *To flip the image horizontally:* Choose Horizontal from the Flip Type pop-up menu.
 - *To flip the image vertically:* Choose Vertical from the Flip Type pop-up menu.
 - *To flip the image both horizontally and vertically:* Choose Horizontal and Vertical from the Flip Type pop-up menu.

Working with the Chromatic Aberration Controls

When you want to fix chromatic aberration, also known as *purple fringing*, you use the Chromatic Aberration adjustment controls. For example, if your image has a ghost image in high-contrast boundary areas, you use the Chromatic Aberration adjustment controls to neutralize the color fringing. Chromatic aberration can be caused by a poorly designed lens that fails to focus light at the correct point on the focal plane when the lens is set at different focal lengths. Certain types of light sources can also cause chromatic aberration.



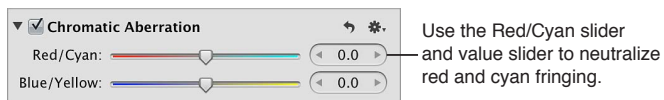
Before Chromatic Aberration adjustment

After Chromatic Aberration adjustment
(increased cyan)

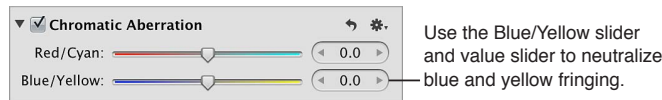
Important: The Chromatic Aberration adjustment controls are available only for images using Aperture 3 image processing. For more information about reprocessing your images, see [An Overview of Reprocessing Photos](#) on page 76.

To remove chromatic aberration from an image

- 1 Select a photo.
- 2 If the Chromatic Aberration controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Chromatic Aberration from the Add Adjustment pop-up menu.
- 3 If your image exhibits red or cyan fringing, neutralize it by doing one of the following:
 - Drag the Red/Cyan slider to the right to add cyan, neutralizing the red fringing, or drag the slider to the left to add red, neutralizing the cyan fringing.
 - Click the left or right arrow in the Red/Cyan value slider, or drag in the value field.
 - Double-click the number in the Red/Cyan value slider, then enter a value from -5.0 to 5.0 and press Return.



- 4 If your image exhibits blue and yellow fringing, neutralize it by doing one of the following:
- Drag the Blue/Yellow slider to the right to add yellow, neutralizing the blue fringing, or drag the slider to the left to add blue, neutralizing the yellow fringing.
 - Click the left or right arrow in the Blue/Yellow value slider, or drag in the value field.
 - Double-click the number in the Blue/Yellow value slider, then enter a value from -5.0 to 5.0 and press Return.



The chromatic aberration is removed from the image.

You can also brush the Chromatic Aberration adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Working with the Devignette Controls

You use the Devignette adjustment controls to correct a vignette that was applied to an image as it was shot. The term *vignette* describes an image whose brightness fades to its periphery from its center. Vignettes are usually caused by poor lens design, stacked filters, lens hoods, and wide-angle zoom lenses. Aperture corrects the image by increasing the brightness on the edges of the image where vignettes typically occur.

Note: When you apply a Devignette and Crop adjustment to the same image, Aperture applies the Devignette adjustment prior to the crop in order to correct lens artifacts. Applying the Devignette adjustment before the crop prevents any distortion that would otherwise appear in the cropped image.



Before Devignette adjustment



After Devignette adjustment

To remove the vignette from your image

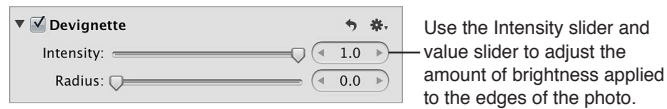
- 1 Select a photo.
- 2 If the Devignette controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Devignette from the Add Adjustment pop-up menu.

3 By default, the Intensity parameter is set to 1.0. Adjust the Intensity parameter by doing one of the following:

- Drag the Intensity slider to the left to decrease the amount of brightness applied to the edges of the image, or drag it to the right to increase the brightness.
- Click the left or right arrow in the Intensity value slider to change the brightness applied to the edges of the image, or drag in the value field.

The left arrow decreases the amount of brightness applied to the edges of the image, and the right arrow increases the brightness.

- Double-click the number in the Intensity value slider, then enter a value from 0.0 to 1.0 and press Return.

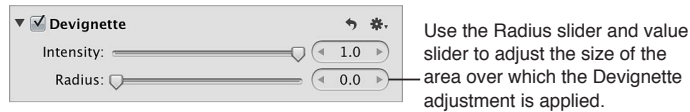


4 To adjust the distance Aperture goes from the edge of the image, in pixels, to apply the Devignette adjustment, do one of the following:

- Drag the Radius slider to the right to increase the number of pixels Aperture goes toward the center of the image to apply the Devignette adjustment, or drag it to the left to limit the vignette to the edges of the image.
- Click the left or right arrow in the Radius value slider, or drag in the value field.

The left arrow limits the Devignette adjustment to the edges of the image, and the right arrow moves the Devignette adjustment toward the center point of the image.

- Double-click the number in the Radius value slider, then enter a value from 0.0 to 2.0 and press Return.



The vignette is removed from the image.

For more information about applying a vignette to an image, see [Working with the Vignette Controls](#) on page 389.

You can also brush the Devignette adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Working with the Noise Reduction Controls

You use the Noise Reduction adjustment controls when you need to reduce digital noise in an image. Digital noise is often caused by shooting at high ISO settings in low-light conditions. When you reduce noise in an image, you often have to sharpen the image to prevent blurry edges or loss of detail. For more information about sharpening an image, see [Working with the Edge Sharpen Controls](#) on page 385.



Before Noise Reduction adjustment

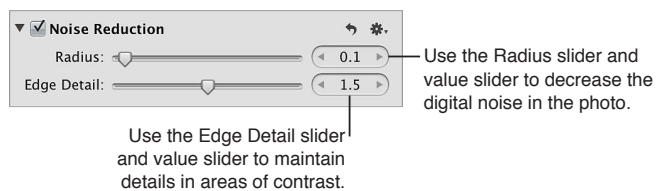
After Noise Reduction adjustment

To reduce digital noise in an image

- 1 Select a photo.
- 2 If the Noise Reduction controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Noise Reduction from the Add Adjustment pop-up menu (or press Control-N).
- 3 Reduce digital noise in the image by doing one of the following:
 - By default, the Radius slider is set to the left side of the slider control. Drag the Radius slider to the right to decrease digital noise in the image, or drag the slider back to the left to reduce the effect of the noise reduction.
 - Click the left or right arrow in the Radius value slider to adjust noise in the image by 5 percent increments, or drag in the value field.

The left arrow increases noise in the image, and the right arrow decreases it.

- Double-click the number in the Radius value slider, then enter a value from 0.0 to 2.0 and press Return.



A value of 0.0 applies no digital noise adjustment to the image. A value greater than 0.0 reduces digital noise in the image.

- 4 Maintain edge detail in areas of high contrast in the image by doing one of the following:
- Drag the Edge Detail slider to the right to increase sharpness in areas of the image with high contrast, or drag the slider back to the left to reduce the sharpening effect.
 - Click the left or right arrow in the Edge Detail value slider to adjust edge detail by 5 percent increments, or drag in the value field.
The left arrow decreases edge detail sharpening in the image, and the right arrow increases it.
 - Double-click the number in the Edge Detail value slider, then enter a value from 0.0 to 3.0 and press Return.

As you change the parameter value, the image is updated to display the amount of edge detail sharpening applied to it.

You can also brush the Noise Reduction adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Working with the White Balance Controls

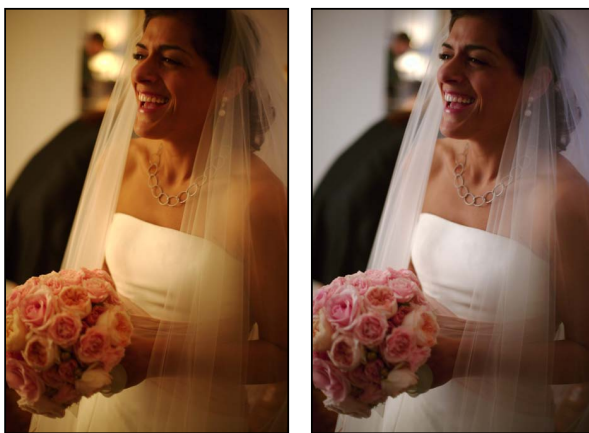
An Overview of the White Balance Adjustment

If an image has unnatural skin tones or pixels that should be pure white, you can use the White Balance adjustment controls to remove the color cast from the image. Aperture provides three methods for adjusting an image's white balance:

- Balance the warmth of the image based on natural gray.
- Balance the warmth of the image based on skin tones.
- Balance the image based on traditional color temperature (in degrees kelvin) and tint.

You can adjust an image's white balance automatically or manually. In most cases, the automatic adjustment succeeds in removing the color cast from the image. You can also use the White Balance eyedropper to choose the natural gray or skin tone pixels that Aperture uses to balance the image. If either the Auto White Balance button or the White Balance eyedropper does not completely remove the color cast from the image, you can use the White Balance controls to fine-tune the adjustment.

Although Aperture can set the white balance of the image with great accuracy, sometimes you have to use a combination of these methods to have the image appear with the warm or cool tonality you intended.



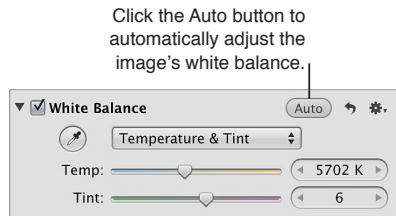
Before White Balance adjustment After White Balance adjustment

Adjusting White Balance Automatically

Correcting white balance in an image is as simple as clicking a button.

To automatically adjust an image's white balance

- 1 Select a photo.
- 2 In the White Balance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the Auto button.



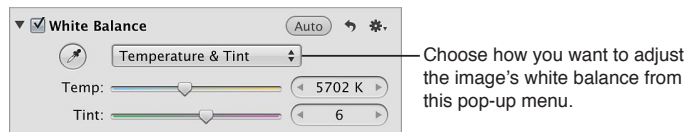
Aperture evaluates the image. If faces are detected in the image, the image is adjusted to preserve skin tones. If no faces are detected, Aperture identifies a natural gray value in the image and adjusts the image's white balance based on that value.

To fine-tune the image's white balance settings after the automatic adjustment has been applied, see [Adjusting White Balance Manually](#) on page 333.

To automatically adjust an image's white balance using the White Balance eyedropper

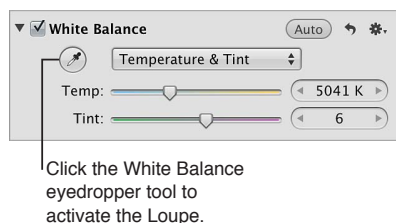
When you have pixels in your image that should be pure white, you can use the White Balance eyedropper tool to automatically set the color temperature and tint of the image.

- 1 Select a photo.
- 2 In the White Balance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose the method Aperture uses to adjust the image's white balance from the White Balance pop-up menu.



- To adjust the image's white balance based on natural gray: Choose Natural Gray.
- To adjust the image's white balance based on a skin tone: Choose Skin Tone.
- To adjust the image's white balance based on color temperature (in degrees kelvin) and tint: Choose Temperature & Tint.

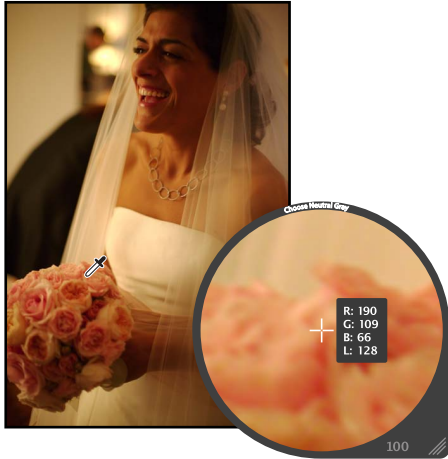
- 3 Select the White Balance eyedropper tool to activate the Loupe.



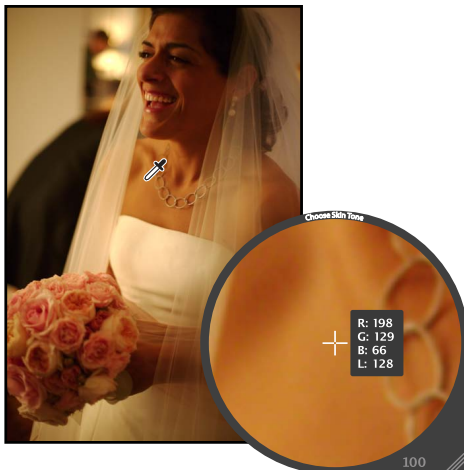
The pointer changes to the Loupe, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+). For more information about the Loupe, see [An Overview of the Loupe](#) on page 89.

4 Do one of the following:

- *If you chose either Natural Gray or Temperature & Tint from the White Balance pop-up menu:* Position the target area of the Loupe over the pixels in the image that are a natural gray, then click.



- *If you chose Skin Tone from the White Balance pop-up menu:* Position the target area of the Loupe over a skin tone in the image, then click.



The white balance of the image is adjusted. The color tonality of the image is shifted either cooler or warmer, depending on the tonality of the original image.

Important: Make sure that there is as little digital noise in the target area of the Loupe as possible. Digital noise can skew the white-balance calculation results, introducing a color cast that wasn't previously there. A simple way to avoid errant pixels is to increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+).

Adjusting White Balance Manually

You can manually adjust an image's white balance using the Warmth, Temp, and Tint parameter controls.

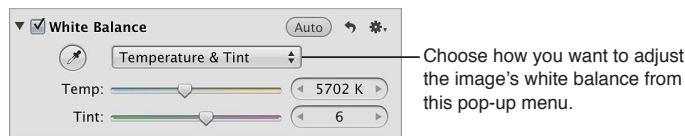
You use the Warmth and Temp parameter controls to adjust the image's color temperature. *Color temperature* is a term used to describe the color of light when the image was shot. However, it refers to the color value of the light rather than its heat value. Light's color temperature is measured in units called *kelvin (K)*. Adjusting the color temperature of the image changes how Aperture interprets the colors in the image in relation to the assigned temperature of light. The purpose of adjusting the color temperature of an image is to make colors look as natural as possible.

You can also manually adjust the tint of an image using the Tint parameter controls. You use the Tint parameter controls when you need to fine-tune the white balance adjustment by neutralizing the remaining green or magenta tint.

Note: The Warmth and Temp parameter controls adjust the image's color temperature in the same way except that Aperture does not display the Warmth values in kelvin (K) units.

To manually adjust the color temperature of an image

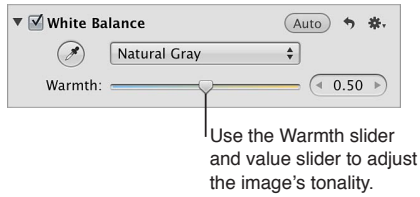
- 1 Select a photo.
- 2 In the White Balance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose the method Aperture uses to adjust the image's white balance from the White Balance pop-up menu.



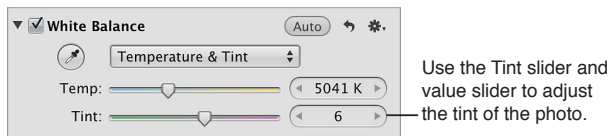
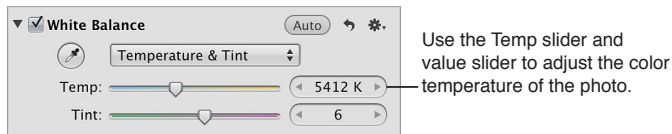
- To adjust the image's white balance based on natural gray: Choose Natural Gray.
- To adjust the image's white balance based on a skin tone: Choose Skin Tone.
- To adjust the image's white balance based on color temperature (in degrees kelvin) and tint: Choose Temperature & Tint.

3 Do one of the following:

- If you chose either *Natural Gray* or *Skin Tone* from the *White Balance* pop-up menu: Use the *Warmth* parameter controls to warm or cool the the image's tonality.



- If you chose *Temperature & Tint* from the *White Balance* pop-up menu: Use the *Temp* parameter controls to adjust the image's color temperature (in degrees kelvin) and the *Tint* parameter controls to neutralize unwanted green or magenta tints.



Tip: You can brush *Natural Gray* and *Skin Tone* *White Balance* adjustments on an image. For more information about working with brushed adjustments, see [An Overview of Brushed Adjustments](#) on page 392.

Working with the Exposure Controls

An Overview of the Exposure Adjustment

You use the Exposure adjustment controls to set the exposure, recovery, black point, and brightness values.



Before Exposure adjustment



After Exposure adjustment

Using the Auto Exposure Button

When you want to quickly adjust the exposure of a RAW image, you can use the Auto Exposure button. Depending on the exposure Aperture sets for the image, you can always fine-tune the image's exposure setting using the Exposure adjustment controls. For more information about manually adjusting the exposure of an image, see [Correcting Exposure in the Image](#) on page 336.



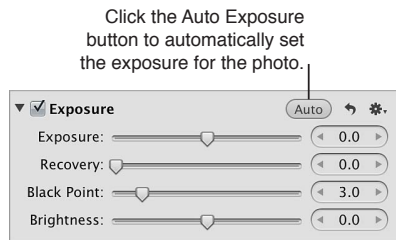
Before Auto Exposure adjustment



After Auto Exposure adjustment

To automatically correct the exposure of a RAW image

- 1 Select a photo.
- 2 In the Exposure area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the Auto Exposure button.



The exposure of the image is automatically corrected. If you need to fine-tune the image's exposure setting, see [Correcting Exposure in the Image](#) on page 336.

Correcting Exposure in the Image

If you've overexposed or underexposed an image, you can correct it by adjusting the Exposure parameter. The amount of latitude you have—the visually acceptable range of f-stops—depends on the file type, the bit depth, and the amount of compression applied to the image during capture. Typically, a RAW file is capable of a slightly wider latitude than a JPEG file.

To correct the exposure of an image

- 1 Select a photo.
- 2 In the Exposure area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Exposure parameter by doing one of the following:
 - Drag the Exposure slider.
 - Click the left or right arrow in the Exposure value slider to change the exposure of the image by 5 percent increments, or drag in the value field.
 - Double-click the number in the Exposure value slider, then enter a value from -9.99 to 9.99 stops and press Return.



A negative value decreases the exposure (darkening the image), and a positive value increases the exposure (lightening the image).

The exposure of the image is updated as you change the parameter value.

Recovering Highlight Details in the Image

Many images, especially RAW image files, have additional highlight detail that isn't displayed by default. Aperture provides the Recovery parameter controls to give you access to that additional headroom. Because digital image sensors differ from camera model to camera model, the highlight headroom varies. In some cases, you can recover significant detail that appears lost or blown out in the most extreme highlight areas of the image.

Note: The Recovery controls are not available for RAW decoding versions 1.0 and 1.1. To make the Recovery controls available, reprocess the image. For more information, see [An Overview of the RAW Fine Tuning Controls](#) on page 289.

To recover highlight details in the image

- 1 Select a photo.
- 2 In the Exposure area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Recovery parameter by doing one of the following:
 - Drag the Recovery slider.
 - Click the left or right arrow in the Recovery value slider to change the amount of highlight detail to recover in the image by 5 percent increments, or drag in the value field.
 - Double-click the number in the Recovery value slider, then enter a value from 0.0 to 1.5 and press Return.



The higher the value, the more highlight information is made available, and the more highlight detail is recovered.

The image's highlights are updated as you change the parameter value.

Setting the Image's Blacks

Shadow detail and the importance of visual elements in shadow vary from image to image. In addition, some cameras are more capable of capturing shadow details than others. In some photos, such as an image of a person's face in the shadow of an alley, the shadow is the most important visual element in the image. In other images, the details in the shadows have nothing to do with the main subject of the image. For example, the shadow area of the image may obscure trash that would otherwise ruin a pristine image. In Aperture, you use the Black Point parameter controls to increase the threshold of shadow details in the image as well as crush the blacks when necessary.

Note: The Black Point controls are not available for RAW decoding versions 1.0 and 1.1. To make the Black Point controls available, reprocess the image. For more information, see [An Overview of the RAW Fine Tuning Controls](#) on page 289.

To set the black point of the image

- 1 Select a photo.
- 2 In the Exposure area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Black Point parameter by doing one of the following:
 - Drag the Black Point slider.
 - Click the left or right arrow in the Black Point value slider to change the shadow detail to recover in the image by 5 percent increments, or drag in the value field.
 - Double-click the number in the Black Point value slider, then enter a value from -5.0 to 50.0 and press Return.



Decreasing the value increases the amount of detail in the shadow areas by moving pure black below the current black point. Increasing the value decreases the amount of detail in the shadow areas of the image, effectively crushing the blacks by moving pure black above the current black point.

The image's black point is updated as you change the parameter value.

Adjusting Brightness in the Image

You can adjust the Brightness parameter when you want to lighten or darken your image. When you adjust brightness, the brightness values of the midtone pixels in the image change the most. You can change the brightness of the image temporarily to see how the adjustment affects details in the shadows, midtones, and highlights. For more precise control over the range of tonality in the image, consider using the Levels adjustment controls. For more information about adjusting levels, see [An Overview of the Levels Adjustment](#) on page 367.

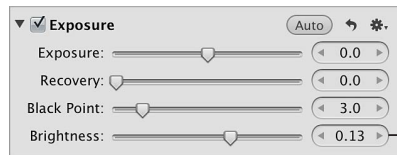


Before Brightness adjustment

After Brightness adjustment

To adjust brightness in an image

- 1 Select a photo.
- 2 In the Exposure area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Brightness parameter by doing one of the following:
 - Drag the Brightness slider.
 - Click the left or right arrow in the Brightness value slider to change the brightness of the image by 5 percent increments, or drag in the value field.
 - Double-click the number in the Brightness value slider, then enter a value from -2.0 to 2.0 and press Return.



Use the Brightness slider and value slider to lighten and darken the photo.

A value below 0.0 decreases the brightness of the image. A value greater than 0.0 increases the brightness of the image. The brightness of the image is updated as you change the parameter value.

Working with the Enhance Controls

An Overview of the Enhance Adjustment

You use the Enhance adjustment controls to set the contrast, definition, saturation, and vibrancy, as well as the black, gray, and white tint values.

You can also brush the Enhance adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Adjusting Contrast in the Image

If you want to adjust the difference between the dark and bright areas of the image, you can modify the Contrast parameter. An image with very little midtone tonality is considered to have a lot of contrast, whereas an image with considerable midtone tonality is considered to have minimal contrast. Often, an image with too much midtone tonality looks flat. Adding contrast to the image can add depth to it. However, you add contrast to the image at the expense of detail in the midtones, so a little contrast goes a long way.

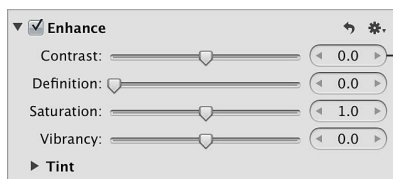


Before Contrast adjustment

After Contrast adjustment

To adjust the contrast in an image

- 1 Select a photo.
- 2 In the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Contrast parameter by doing one of the following:
 - Drag the Contrast slider.
 - Click the left or right arrow in the Contrast value slider to change the contrast of the image by 5 percent increments, or drag in the value field.
 - Double-click the number in the Contrast value slider, then enter a value from -1.0 to 1.0 and press Return.



Use the Contrast slider and value slider to modify the contrast between light and dark colors in the photo.

A value below 0.0 decreases the contrast in the image. A value greater than 0.0 increases the contrast in the image. The contrast in the image is updated as you change the parameter value.

Note: If you're trying to retrieve detail in a high-contrast image, you should use the Highlights & Shadows controls. For more information, see [Adjusting Highlights, Shadows, and Midtone Contrast](#) on page 364.

Adjusting Definition in the Image

When you want to add a little clarity and definition to an image without adding too much contrast, you use the Definition parameter controls. The Definition parameter is useful for adding local contrast (adding contrast to areas of the image that are improved by a contrast adjustment without affecting the image's global contrast) as well as reducing haze.



Before Definition adjustment

After Definition adjustment

To adjust definition in an image

- 1 Select a photo.
- 2 In the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Definition parameter by doing one of the following:
 - Drag the Definition slider.
 - Click the left or right arrow in the Definition value slider to change the clarity of the image by 5 percent increments, or drag in the value field.
 - Double-click the number in the Definition value slider, then enter a value from 0.0 to 1.0 and press Return.



Use the Definition slider and value slider to add local contrast to the photo.

A value greater than 0.0 increases the clarity in the image. The definition in the image is updated as you change the parameter value.

Adjusting Saturation in the Image

You can change the value for the Saturation parameter to either give your image an extra burst of color or tone down the color palette by desaturating the image.



Before Saturation adjustment

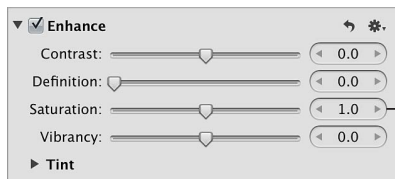


After Saturation adjustment

Important: Increasing the saturation of an image can make the colors appear more pure, and many people like the effect of an image whose colors are more saturated than they would appear naturally. However, you can easily oversaturate an image. In the process of making the colors more pure, subtleties in shades of colors disappear, often resulting in reduced detail in the image. To ensure that visual elements aren't unnecessarily lost, pay attention to the details in your image as you increase saturation.

To change the saturation of an image

- 1 Select a photo.
- 2 In the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Saturation parameter by doing one of the following:
 - Drag the Saturation slider.
 - Click the left or right arrow in the Saturation value slider to change the saturation of the image by 5 percent increments, or drag in the value field.
 - Double-click the number in the Saturation value slider, then enter a value from 0.0 to 4.0 and press Return.



Use the Saturation slider and value slider to adjust the saturation of colors in the photo.

A value below 1.0 decreases the color saturation in the image, and a value above 1.0 increases the saturation. A value of 0.0 removes all color from the image, making it grayscale. A value of 4.0 increases the saturation by 400 percent.

The saturation of the image is updated as you change the parameter value.

Adjusting Vibrancy in the Image

You use the Vibrancy parameter controls when you want to add a bit of punch to the image without affecting skin tones. The Vibrancy parameter applies saturation to the image in a nonlinear manner. Colors that are already saturated are left alone, while saturation is added to all other colors. In addition, the Vibrancy parameter takes skin tones into account, leaving them untouched. This allows you to take a portrait and desaturate the image except for the skin tones.



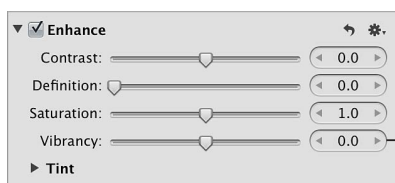
Before Vibrancy adjustment



After Vibrancy adjustment
(reduced saturation except for the skin tones)

To adjust vibrancy in an image

- 1 Select a photo.
- 2 In the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, adjust the Vibrancy parameter by doing one of the following:
 - Drag the Vibrancy slider.
 - Click the left or right arrow in the Vibrancy value slider to change the saturation of the image by 5 percent increments, or drag in the value field.
 - Double-click the number in the Vibrancy value slider, then enter a value from -1.0 to 1.0 and press Return.



A value below 0.0 decreases the color saturation in the image, and a value above 0.0 increases the saturation of the nonsaturated colors. A value of -1.0 removes all color from the image, making it grayscale except for any skin tones.

Setting the Tint of Black, Gray, and White Values in the Image

You use the Black Tint, Gray Tint, and White Tint color wheels when you want to selectively remove color casts from the shadows, midtones, and highlights in the image. Color casts are often caused by shooting in mixed lighting and unnatural lighting situations, where the difference in the color from the mixture of multiple types of source lights can produce a color variance in a specific tonal range in an image. For example, when shooting indoors, interior incandescent (tungsten) lighting can often produce a yellow color cast through the white colors in the image. Using the White Tint eyedropper, you can have Aperture isolate the highlights and add blue to the white values, thereby reducing the yellow color cast and returning the whites to neutral white.

There are two methods for selectively adjusting the tint values in an image: you can use the Black Tint, Gray Tint, and White Tint eyedroppers to have Aperture automatically adjust the tint to neutral color values, or you can use the Black Tint, Gray Tint, and White Tint color wheels to manually adjust the tint values. The method you choose is determined by the level of precision you require. The eyedroppers provide an accurate means of identifying the color cast within the tonal range of each eyedropper and returning the color values to neutral. However, depending on the subject, you may not want to completely remove the color cast found in a specific tonal range. Therefore, you can manually adjust the tint values in the shadows, midtones, and highlights using the Black Tint, Gray Tint, and White Tint color wheels.

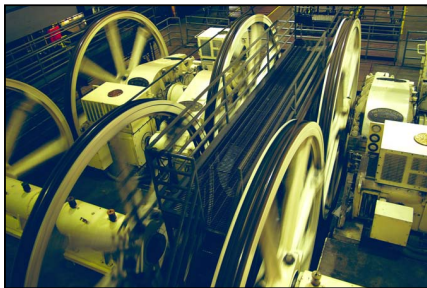
For more information about using the eyedroppers to adjust the black, gray, and white tints in the image, see [Using the Eyedroppers to Set the Tint in an Image](#) on page 344.

For more information about manually adjusting the black, gray, and white tints in the image, see [Manually Setting the Tint in an Image](#) on page 349.

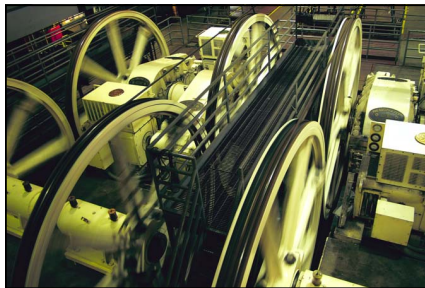
Using the Eyedroppers to Set the Tint in an Image

You use the Black Tint, Gray Tint, and White Tint eyedropper tools when you want to have Aperture selectively modify the tints of the shadows, midtones, and highlights in an image automatically.

You use the Black Tint eyedropper to remove color casts from the shadows in your images.

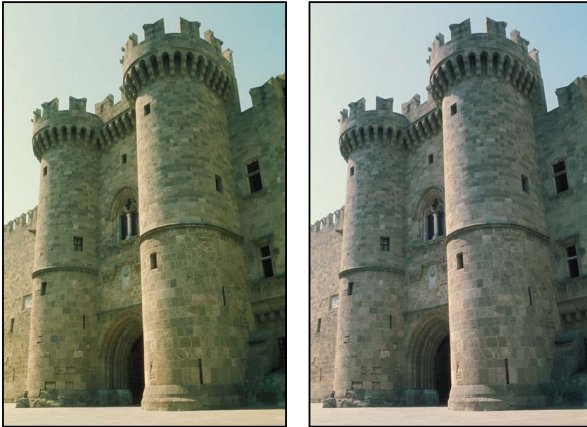


Before Black Tint adjustment



After Black Tint adjustment

You use the Gray Tint eyedropper to remove color casts from the midtones in your images.



Before Gray Tint adjustment

After Gray Tint adjustment

You use the White Tint eyedropper to remove color casts from the highlights in your images.



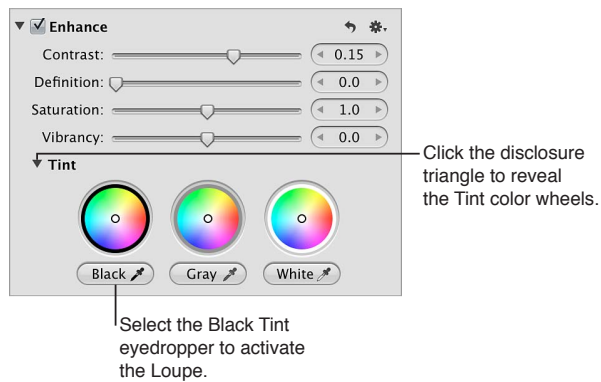
Before White Tint adjustment

After White Tint adjustment

Whereas using the White Balance controls adjusts the tints of all tonal values in the image uniformly, the Black Tint, Gray Tint, and White Tint eyedropper tools allow you to selectively neutralize color casts that affect only the shadows, midtones, or highlights. In some difficult cases, you can use the Black Tint, Gray Tint, and White Tint eyedropper tools in combination with the White Balance controls to first neutralize a tint in a specific tonal range and then uniformly remove the tint from the rest of the image. For more information about adjusting white balance, see [An Overview of the White Balance Adjustment](#) on page 330.

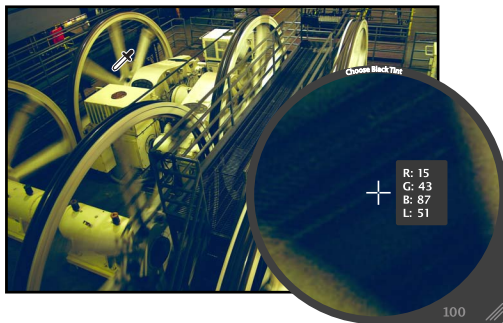
To set the tint of the shadows in an image

- 1 Select a photo.
- 2 If necessary, click the Tint disclosure triangle in the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD to reveal the Tint color wheels, then select the Black Tint eyedropper.



The pointer changes to the Loupe, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+). For more information about the Loupe, see [An Overview of the Loupe](#) on page 89.

- 3 Position the target area of the Loupe over the darkest pixels in the image, then click.

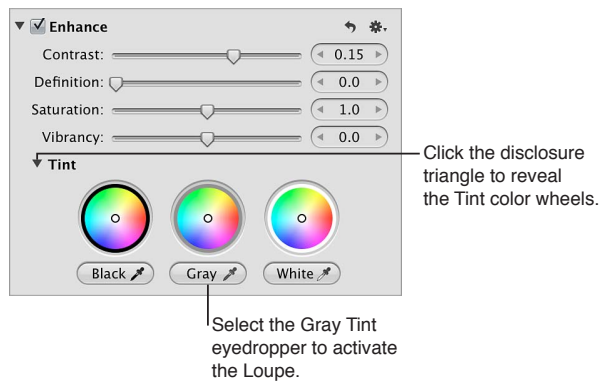


The tint (hue and saturation) of the black values in the image is set to remove the color cast in the shadows.

Important: Make sure that there are no bright pixels in the target area of the Loupe. Bright pixels in the target area can skew the Black Tint calculation, making the image look different than intended. A simple way to avoid errant bright pixels is to increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+).

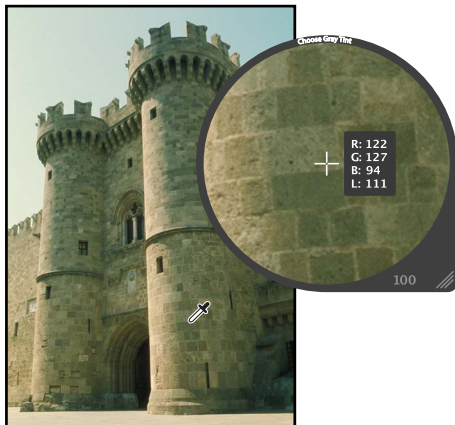
To set the tint of the midtone values in an image

- 1 Select a photo.
- 2 If necessary, click the Tint disclosure triangle in the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD to reveal the Tint color wheels, then select the Gray Tint eyedropper.



The pointer changes to the Loupe, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+). For more information about the Loupe, see [An Overview of the Loupe](#) on page 89.

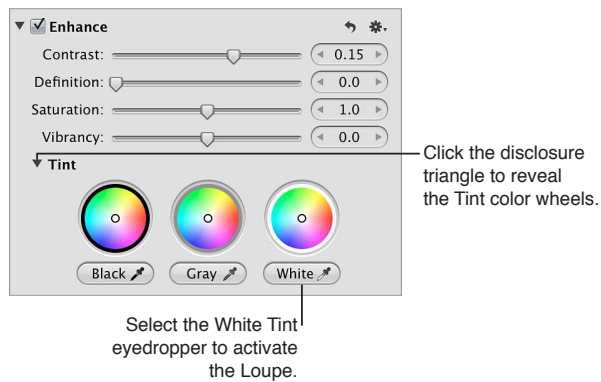
- 3 Position the target area of the Loupe over a midrange color that is as close as possible to medium gray, then click.



The tint (hue and saturation) of the gray values in the image is set to remove the color cast in the midtones.

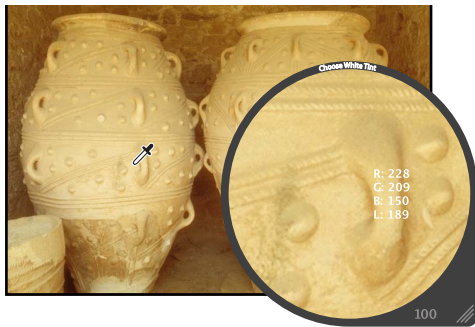
To set the tint of the highlight values in an image

- 1 Select a photo.
- 2 If necessary, click the Tint disclosure triangle in the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD to reveal the Tint color wheels, then select the White Tint eyedropper.



The pointer changes to the Loupe, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+). For more information about the Loupe, see [An Overview of the Loupe](#) on page 89.

- 3 Position the target area of the Loupe over the lightest (white) pixels in the image, then click.



The tint (hue and saturation) of the white values in the image is set to remove the color cast in the highlights.

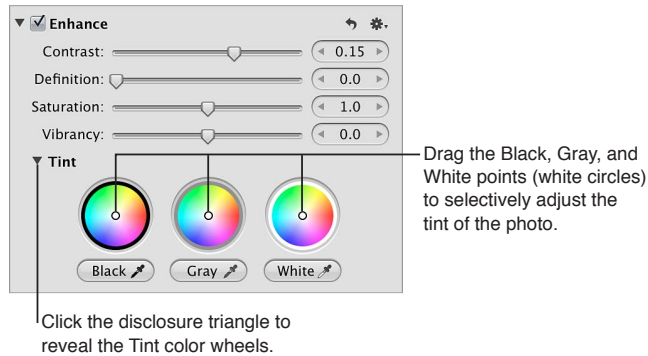
Important: Make sure that there are no dark pixels in the target area of the Loupe. Dark pixels in the target area can skew the White Tint calculation, making the image look different than intended. A simple way to avoid errant dark pixels is to increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+).

Manually Setting the Tint in an Image

You can also manually adjust the tint of the shadow, midtone, and highlight values in an image using the Black Tint, Gray Tint, and White Tint color wheels.

To manually adjust the tint of the shadow, midtone, and highlight values in an image

- 1 Select a photo.
- 2 If necessary, click the Tint disclosure triangle in the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, then do the following:
 - *To adjust the tint of the shadows:* Drag the Black point in the Black Tint color wheel.
 - *To adjust the tint of the midtones:* Drag the Gray point in the Gray Tint color wheel.
 - *To adjust the tint of the highlights:* Drag the White point in the the White Tint color wheel.

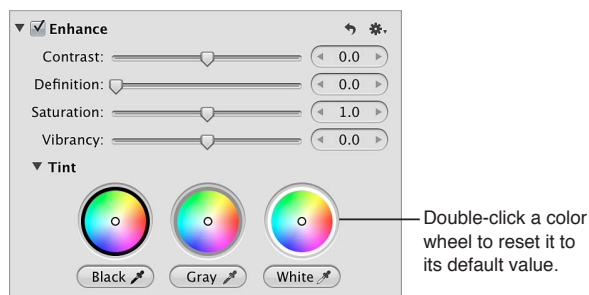


You remove a color cast in a tonal range by dragging the point in the color wheel toward the opposite color. For example, to remove a blue cast, you drag the point in the color wheel toward yellow until the color cast is neutralized.

To reset a Tint color wheel

You can individually reset the Tint color wheels without affecting the other parameters in the Enhance area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.

- Double-click the color wheel.



Working with the Curves Controls

An Overview of the Curves Adjustment

You use the Curves adjustment controls when you want to manually set the tonal values of the shadows, midtones, and highlights in an image using a tonal curve. Unlike the Levels adjustment controls, the Curves controls do not reappportion the luminance values in the image by constraining the white and black points. Instead, you use the Curves controls to precisely remap the position of the midtones relative to the white and black points. Because the human eye's perception of light is logarithmic rather than incremental, a curve is necessary to distribute the luminance values across all tonal ranges in an image in a way that matches how the eye perceives light in nature.

In addition to adjusting the tonal values of an image for overall luminance, you can also color correct an image by applying the Curves adjustment to the red, green, and blue channels independently. Applying a Curves adjustment to each color channel allows you to control the color tonality in an image.

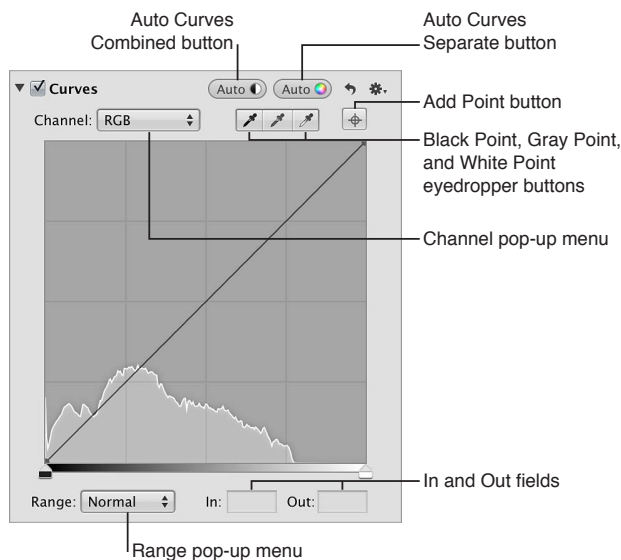
You can also have Aperture automatically identify tonal ranges in an image using the Black Point, Gray Point, and White Point eyedropper tools in the Curves adjustment controls. When you select a tonal range using one of the eyedropper tools, Aperture plots the corresponding curve over the Curves histogram.

You can also brush the Curves adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Important: The Curves adjustment controls are only available for images using Aperture 3 image processing. For more information about reprocessing your images, see [An Overview of Reprocessing Photos](#) on page 76.

Curves Adjustment Controls

Before applying a Curves adjustment, it's a good idea to get acquainted with the Curves adjustment controls.



- *Channel pop-up menu*: Choose a color channel to apply a tonal curve to from this pop-up menu. You can also apply the tonal curve to all color channels combined, as well as show separate color channel overlays when tonal curve adjustments are applied to individual color channels.
- *Auto Curves Combined button*: Click this button to apply a tonal curve adjustment when you want to correct contrast based on total luminance, without affecting the color cast of the image.
- *Auto Curves Separate button*: Click this button to apply a tonal curve adjustment when you want to correct contrast as well as remove color casts in the image.
- *Black Point eyedropper tool*: Use this eyedropper to set the black point in the image.
- *Gray Point eyedropper tool*: Use this eyedropper to set the gray point in the image.
- *White Point eyedropper tool*: Use this eyedropper to set the white point in the image.
- *Add Point button*: Click this button to use the Loupe to sample pixels in the image and then add a point to the tonal curve for each color channel as well as the RGB tonal curve.
- *In and Out fields*: Enter the In and Out point values for a selected point on the tonal curve. The In point represents the horizontal axis (x-axis), and the Out point represents the vertical axis (y-axis).
- *Range pop-up menu*: Choose a viewing range option from this pop-up menu. Choosing Shadows restricts the view of the histogram and tonal curve from pure black to 50 percent gray. Choosing Normal presents the view of the histogram and tonal curve from pure black to pure white. Choosing Extended enlarges the view of the histogram from pure black to two times pure white. Because some cameras are capable of capturing image information beyond pure white, using the Extended range option provides controls for bringing that information into the viewable image.

Working with the Auto Curves Buttons

You use the Auto Curves buttons to analyze the image and apply a tonal curve adjustment to the image based on that analysis. This is a good way to make a quick correction to an image before fine-tuning the Curves adjustment with the manual adjustment controls.

To automatically adjust the tonal curve of an image based on total luminance

When you want to quickly adjust the tonal curve of an image based on total luminance values—red, green, and blue channels combined—you click the Auto Curves Combined button. Red, green, and blue channels are adjusted by the same amount based on the total luminance. You use the Auto Curves Combined button for luminance when you want to correct the contrast of the image without modifying the color cast of the image.



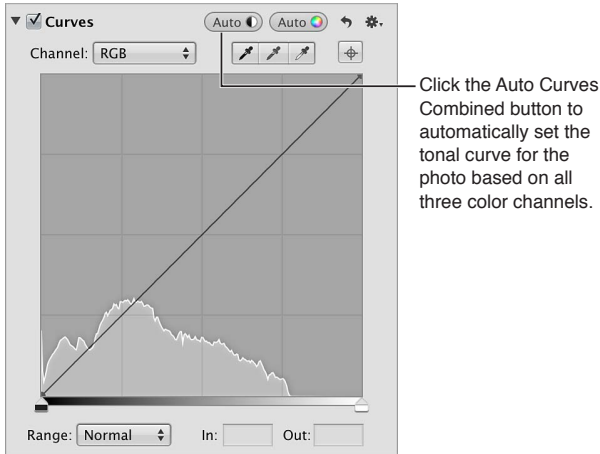
Before Auto Curves Combined adjustment



After Auto Curves Combined adjustment

- 1 Select a photo.
- 2 If the Curves controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Curves from the Add Adjustment pop-up menu.

- 3 In the Curves area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the Auto Curves Combined button.



The tonal curve of the image is adjusted. To fine-tune the tonal curve adjustment, see [Adjusting the Tonal Curve of an Image Using the Curves Controls](#) on page 353.

To automatically adjust the tonal curve of an image based on an evaluation of each color channel

When you want to automatically adjust the tonal curve of an image based on individual evaluations of the red, green, and blue channels, you use the Auto Curves Separate button. Red, green, and blue channels are adjusted based on the evaluation of each channel. You use the Auto Curves Separate button when you want to correct the color cast in the image in addition to correcting the contrast.



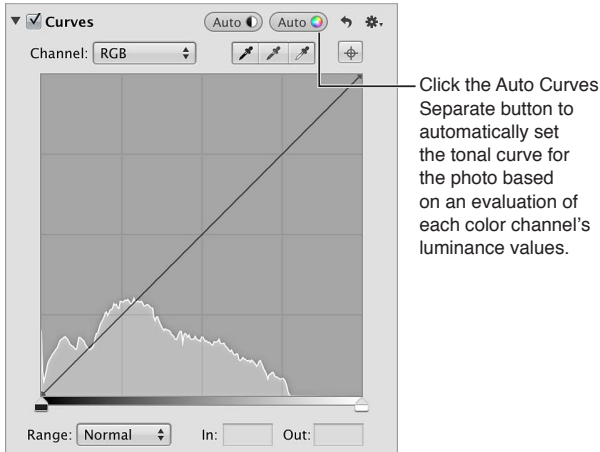
Before Auto Curves Separate adjustment



After Auto Curves Separate adjustment

- 1 Select a photo.
- 2 If the Curves controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Curves from the Add Adjustment pop-up menu.

- 3 In the Curves area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the Auto Curves Separate button.



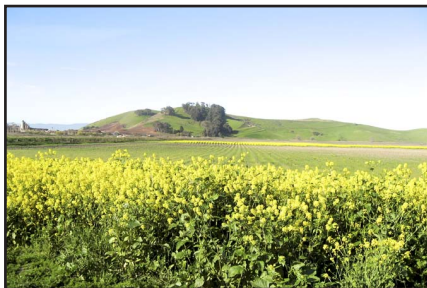
The tonal curve of the image is automatically adjusted for each color channel. To fine-tune the tonal curve adjustment, see [Adjusting the Tonal Curve of an Image Using the Curves Controls](#) on page 353.

Adjusting the Tonal Curve of an Image Using the Curves Controls

You use the tonal curve in the Curves adjustment controls to adjust the overall tonality of an image. There are two types of tonal curve adjustments: RGB and Luminance. When you want to specify a tonal curve adjustment that modifies both the contrast and the tint in the image, you use the RGB tonal curve. When you want to adjust the overall tonality of an image without affecting its color cast, you use the luminance tonal curve.

As you perform a tonal curve adjustment, a histogram is displayed behind the tonal curve and is updated as you manipulate the tonal curve. You can specify the tonal range of the histogram to focus the graph on the part of the tonal curve you plan to work with. For example, if you plan to manipulate the contrast in the shadow areas of the image, you can limit the tonal range of the tonal curve and histogram to display pure black to 50 percent gray only. You can also extend the range of the histogram and tonal curve beyond pure white to capture highlight detail that would be clipped otherwise.

You can also adjust the tonal curve of each color channel independently. For more information, see [Using the Curves Controls for Color Correction](#) on page 361.



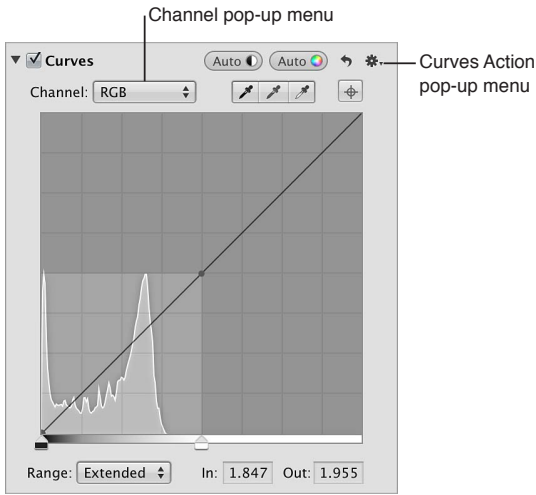
Before Curves adjustment



After Curves adjustment

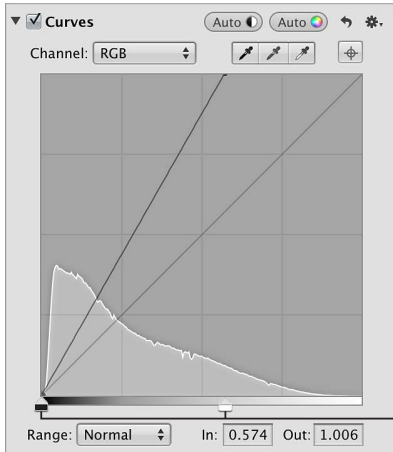
To adjust the tonal curve of an image based on luminance

- 1 Select a photo.
- 2 If the Curves controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Curves from the Add Adjustment pop-up menu.



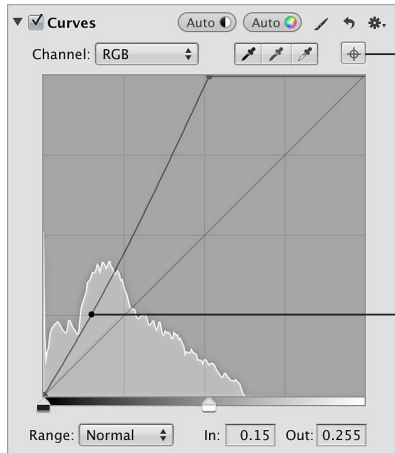
- 3 Do one of the following:
 - Choose RGB from the Channel pop-up menu.
Choosing the RGB tonal curve allows you to manipulate the tonal curve of the red, green, and blue color channels combined. This is the proper choice when you want to modify the tint of the image in addition to the contrast.
 - Choose Luminance from the Grayscale section of the Curves Action pop-up menu, then choose Luminance from the Channel pop-up menu.
Choosing the luminance tonal curve allows you to manipulate the luminance of the combined red, green, and blue color channels without affecting the image's tint.
- 4 Choose the tonal range to display from the Range pop-up menu.
For more information about the options in the Range pop-up menu, see [Curves Adjustment Controls](#) on page 350.
- 5 Choose the type of tonal curve adjustment to apply to the image from the Type section of the Curves Action pop-up menu.
Choosing Linear—the default option—applies the Curves adjustment to the image evenly from pure black to pure white and beyond. Choosing Gamma-Corrected applies the Curves adjustment logarithmically to match the way the human eye perceives light, adding additional weight to the shadows.

- 6 Drag the Black Point and White Point sliders to where they touch the outside of the histogram graph, constraining the image to its new black and white points.



Drag the Black Point and White Point sliders to where they touch the outside of the histogram graph.

- 7 Set a point along the curve by doing one of the following:
 - Click a place on the curve where you want to add a point.



Click the Add Point button to use the eyedropper tool to sample a portion of the photo and add a point to the tonal curve.

Click the tonal curve to add a new point, and drag the new point to set the tonal value.

- Click the Add Point button and use the eyedropper tool to sample a portion of the image.

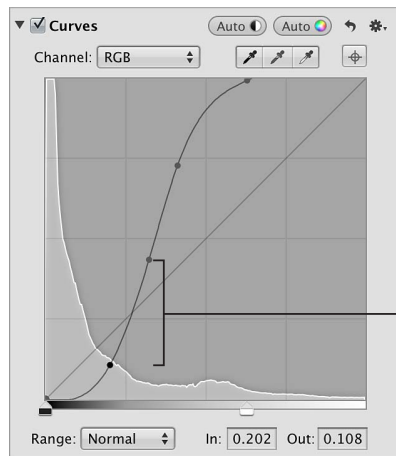
Note: You can change the Loupe's color value sample size by choosing an option from the Adjustment Action pop-up menu. For more information, see [Using the Color Meter and Displaying Camera Information](#) on page 286.

Aperture places a point on the curve in the exact tonal range of the sampled area of the image.

8 Adjust the shape of the curve by doing one of the following:

- Drag the point on the curve until that tonal area of the image looks correct.
For example, dragging a point down in the shadow area of the curve darkens the shadows in the image, and dragging a point up in the shadow area lightens the shadows in the image.
- Click a point on the curve and enter new In point and Out point values in the In and Out fields.
The In point values represent the horizontal axis of the graph, and the Out point values represent the vertical axis of the graph.

Points on the curve that are not selected remain anchored, allowing you to independently adjust each tonal area.



Darkening the shadows and lightening the highlights creates an S-curve, indicating that the photo's contrast is increased.

9 Repeat steps 7 and 8 for each tonal area in the image that you want to correct.

The tonal values in the image are adjusted, giving the image the appropriate amount of contrast.

Using Eyedropper Tools to Set Black, Gray, and White Points

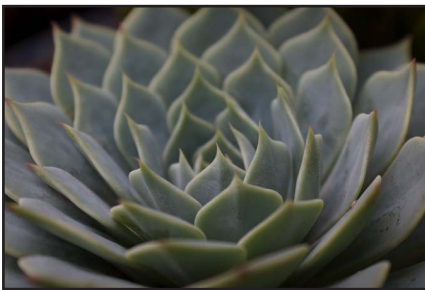
You use the Black Point, Gray Point, and White Point eyedropper tools in the Curves adjustment controls when you want to have Aperture selectively modify the tonal values of the shadows, midtones, and highlights in an image automatically. Using an eyedropper tool, you sample the pixels of the tonal value in the image you intend to correct, and Aperture places a point on the tonal curve and automatically adjusts the image so that the pixels that fall in the same tonal range as the sampled pixels are set to either black, gray, or white. For example, you use the Black Point eyedropper tool to select the specific area of the image that should be black. Aperture samples the pixels within the selection, places a point on the curve, and then adjusts the curve to make the selected pixels—and all other pixels in the image of the same tonal value or darker—black.



Before Black Point Curves adjustment



After Black Point Curves adjustment



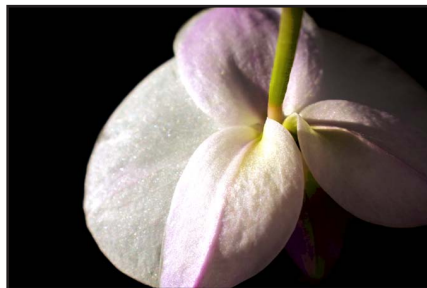
Before Gray Point Curves adjustment



After Gray Point Curves adjustment



Before White Point Curves adjustment

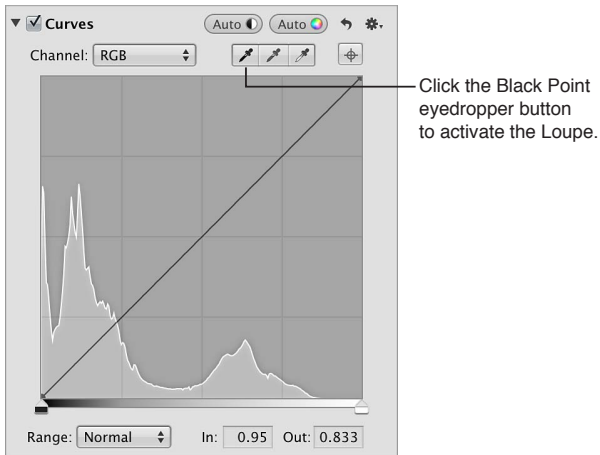


After White Point Curves adjustment

In some difficult cases, you can use the Black Point, Gray Point, and White Point eyedropper tools in combination with points that you manually place on the tonal curve to neutralize a tint or create the specific contrast you want in the image. For more information about manually adjusting the tonal curve, see [Adjusting the Tonal Curve of an Image Using the Curves Controls](#) on page 353.

To set the black point in an image

- 1 Select a photo.
- 2 If the Curves controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Curves from the Add Adjustment pop-up menu.
- 3 Select the Black Point eyedropper tool to activate the Loupe.



The pointer changes to an eyedropper, and the Loupe appears, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by choosing a larger magnification value from the Loupe pop-up menu. For more information, see [An Overview of the Loupe](#) on page 89.

- 4 Position the eyedropper over the darkest pixels in the image, then click.

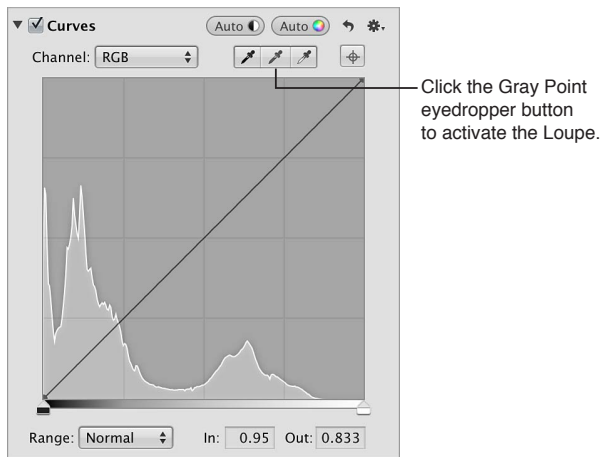


The sampled pixels are used to set the black point in the image.

To set the gray point in an image

- 1 Select a photo.
- 2 If the Curves controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Curves from the Add Adjustment pop-up menu.

- 3 Select the Gray Point eyedropper tool to activate the Loupe.



The pointer changes to an eyedropper, and the Loupe appears, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by choosing a larger magnification value from the Loupe pop-up menu. For more information, see [An Overview of the Loupe](#) on page 89.

- 4 Position the eyedropper over a midrange color that is as close as possible to medium gray, then click.



The sampled pixels are used to set the gray point in the image.

To set the white point in an image

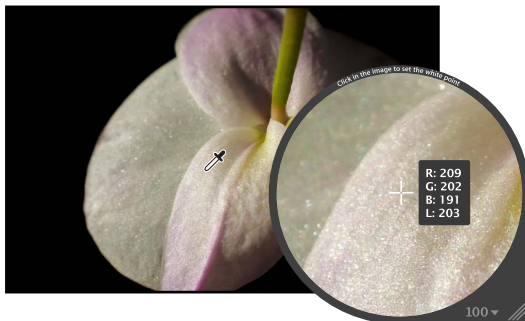
- 1 Select a photo.
- 2 If the Curves controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Curves from the Add Adjustment pop-up menu.

- 3 Select the White Point eyedropper tool to activate the Loupe.



The pointer changes to an eyedropper, and the Loupe appears, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by choosing a larger magnification value from the Loupe pop-up menu. For more information, see [An Overview of the Loupe](#) on page 89.

- 4 Position the eyedropper over the lightest pixels in the image, then click.



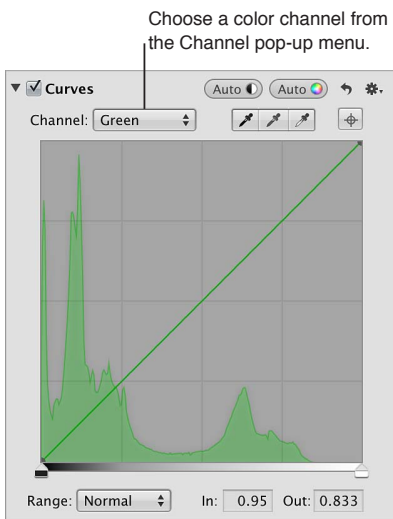
The sampled pixels are used to set the white point in the image.

Using the Curves Controls for Color Correction

One of the most powerful ways to remove a color cast from an image or accentuate a desirable color cast is to adjust the tonal curves of the red, green, and blue color channels independently. It's important to understand that you're adjusting the colors of the image within the RGB spectrum; therefore, you reduce yellow when you increase blue, you reduce magenta when you increase green, and so on.

To adjust the tonal curve of a single color channel in an image

- 1 In the Curves area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose a single color channel from the Channel pop-up menu.



- 2 Place points on the curve, and adjust them as necessary, to remove or accentuate a color cast in the image.

For more information about placing points on the tonal curve, see [Adjusting the Tonal Curve of an Image Using the Curves Controls](#) on page 353.

Adjusting the Tonal Curve of the Red Color Channel

You adjust the tonal curve of the red color channel when you want to remove red and cyan color casts in the image.



Before Red Curves adjustment



After Red Curves adjustment

Red adjustment	Effect
Move tonal curve down in the shadows.	Adds cyan to the shadows, removing red.
Move tonal curve up in the shadows.	Adds red to the shadows, removing cyan.
Move tonal curve down in the midtones.	Adds cyan to the midtones, removing red.
Move tonal curve up in the midtones.	Adds red to the midtones, removing cyan.
Move tonal curve down in the highlights.	Adds cyan to the highlights, removing red.
Move tonal curve up in the highlights.	Adds red to the highlights, removing cyan.

Adjusting the Tonal Curve of the Green Color Channel

You adjust the tonal curve of the green color channel when you want to remove green and magenta color casts in the image.



Before Green Curves adjustment



After Green Curves adjustment

Green adjustment	Effect
Move tonal curve down in the shadows.	Adds magenta to the shadows, removing green.
Move tonal curve up in the shadows.	Adds green to the shadows, removing magenta.
Move tonal curve down in the midtones.	Adds magenta to the midtones, removing green.
Move tonal curve up in the midtones.	Adds green to the midtones, removing magenta.
Move tonal curve down in the highlights.	Adds magenta to the highlights, removing green.
Move tonal curve up in the highlights.	Adds green to the highlights, removing magenta.

Adjusting the Tonal Curve of the Blue Color Channel

You adjust the tonal curve of the blue color channel when you want to remove blue and yellow color casts in the image.



Before Blue Curves adjustment



After Blue Curves adjustment

Blue adjustment	Effect
Move tonal curve down in the shadows.	Adds yellow to the shadows, removing blue.
Move tonal curve up in the shadows.	Adds blue to the shadows, removing yellow.
Move tonal curve down in the midtones.	Adds yellow to the midtones, removing blue.
Move tonal curve up in the midtones.	Adds blue to the midtones, removing yellow.
Move tonal curve down in the highlights.	Adds yellow to the highlights, removing blue.
Move tonal curve up in the highlights.	Adds blue to the highlights, removing yellow.

Working with the Highlights & Shadows Controls

An Overview of the Highlights & Shadows Adjustment

You use the Highlights & Shadows adjustment controls to correct the exposure in images shot in complex lighting conditions. For example, you can use the Highlights & Shadows controls to correct the exposure of the darker areas (shadows) of an image that was otherwise correctly exposed for silhouette. You can also use the Highlights & Shadows controls to retrieve detail in extremely bright areas of an image. This is particularly useful when adjusting images of clouds or snow, or images correctly exposed for the shadow areas. Using the Highlights & Shadows controls is the best way to optimize your image's exposure in the highlights, midtones, or shadows without compromising detail in the other areas of tonality.

You can also brush the Highlights & Shadows adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Adjusting Highlights, Shadows, and Midtone Contrast

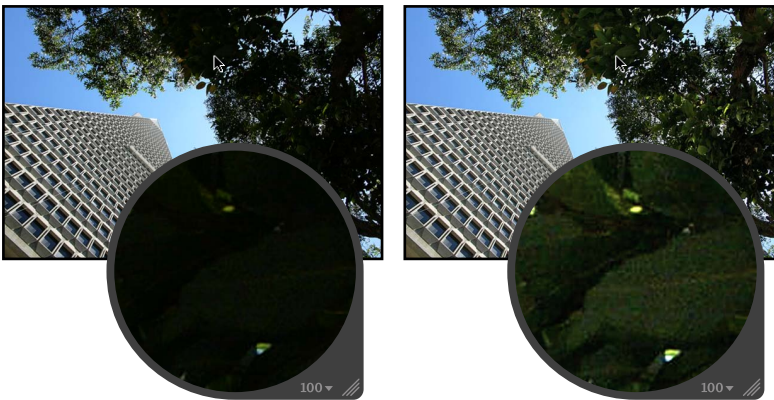
When you want to adjust the brightness values in the highlight areas of the image without affecting the midtones and shadows, you can adjust the Highlights parameter. Although the human eye is more sensitive to details in shadow areas than in highlight areas, such as snow, there is usually a fair amount of visual information that you can retrieve in the highlights using the Highlights parameter controls. Another example of when to use the Highlights controls is when the background of your image is correctly exposed, and the foreground of the image is slightly overexposed. In this case, you use the Highlights controls to make the overexposed foreground match the exposure of the correctly exposed background.



Before Highlights adjustment

After Highlights adjustment

Adjusting the shadow areas is necessary when the shadow areas in an image are underexposed. A good example is an image shot in a doorway, where the background is correctly exposed but the foreground is a little underexposed. Adjusting the shadows lightens the pixels in the shadow areas only, bringing out detail that would normally have been shades of black or dark gray.



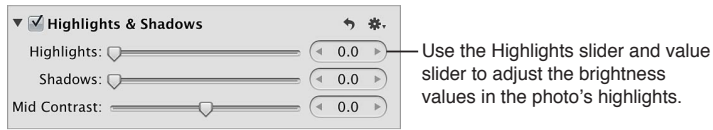
Before Shadows adjustment

After Shadows adjustment

You can also adjust the amount of contrast in the midtones of the image using the Mid Contrast parameter controls.

To adjust the highlights, shadows, and midtone contrast in an image

- 1 Select a photo.
- 2 In the Highlights & Shadows area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, do any of the following:
 - *To recover details in the highlight areas of the image:* Use the Highlights parameter controls.



Aperture isolates the areas of the image with highlights and updates them as you change the parameter value.

- *To recover details in the shadow areas of the image:* Use the Shadows parameter controls.



Aperture isolates the shadow areas of the image and updates them as you change the parameter value.

- *To adjust the amount of contrast in the midtones of the image:* Use the Mid Contrast parameter controls.



Aperture modifies the contrast in the image's midtones as you change the parameter value.

Upgrading Images Previously Adjusted with Highlights & Shadows Adjustment Controls

The Highlights & Shadows adjustment controls have been updated in Aperture 3.3 for ease of use, reduced halo effect with shadow adjustments, improved highlight detail recovery, and better overall performance. Images that were adjusted using the original Highlights & Shadows controls are not upgraded by default. The original image processing is preserved, and you can continue to use the original Highlights & Shadows parameter controls. When you upgrade your image to use the new Highlights & Shadows adjustment controls, Aperture removes the old Highlights & Shadows adjustment and reprocesses the image using the new Highlights & Shadows adjustment. The image's appearance will change.

Note: For information about using the legacy Highlights & Shadows adjustment controls, see [Working with the Original Highlights & Shadows Adjustment Controls](#) on page 366.

To upgrade an image to use the new Highlights & Shadows adjustment controls

- 1 Select a photo that has a Highlights & Shadows adjustment applied to it using a previous version of Aperture.

An Upgrade button appears at the top of the Highlights & Shadows adjustment controls in the Adjustments inspector and the Adjustments pane of the Inspector HUD.

- 2 Click the Upgrade button.

The image is upgraded to use the new Highlights & Shadows adjustment, and the new controls appear. The highlight and shadow details in the image may change.

Working with the Original Highlights & Shadows Adjustment Controls

If you don't want to upgrade an image to use the new Highlights & Shadows adjustment controls, you can still fine-tune a Highlights & Shadows adjustment that was applied to the image using a previous version of Aperture.

Note: When Highlights & Shadows adjustments are applied to an image for the first time in Aperture 3.3 or later, only the new Highlights & Shadows controls appear.

To adjust an image using the legacy Highlights & Shadows adjustment controls

- 1 Select a photo that has a Highlights & Shadows adjustment applied to it using a previous version of Aperture.

An Upgrade button appears at the top of the Highlights & Shadows adjustment controls indicating that the Highlights & Shadows adjustment was applied to the image using a previous version of Aperture.

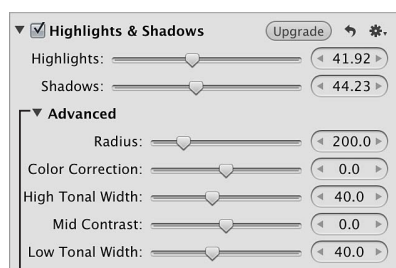
- 2 In the Highlights & Shadows area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, do one of the following:

- *To recover details in the highlight areas of the image:* Use the Highlight parameter controls. Aperture isolates the areas of the image with highlights and updates them as you change the parameter value.

- *To recover details in the shadow areas of the image:* Use the Shadow parameter controls.

Aperture isolates the shadow areas of the image and updates them as you change the parameter value.

- 3 If you want to adjust the Highlights & Shadows advanced settings, click the Advanced disclosure triangle to show the advanced Highlights & Shadows controls, then do any of the following:



Click the disclosure triangle to reveal the advanced Highlights & Shadows controls.

- *To set the area Aperture uses to determine each pixel's tonality:* Use the Radius parameter controls.
- *To set the amount of saturation applied during a Highlights or Shadows adjustment:* Use the Color Correction parameter controls.

- *To set the range of tones that are modified in the highlights:* Use the High Tonal Width parameter controls.
- *To set the amount of contrast in the midtones:* Use the Mid Contrast parameter controls.
- *To set the range of tones that are modified in the shadows:* Use the Low Tonal Width parameter controls.

Working with the Levels Controls

An Overview of the Levels Adjustment

You use the Levels adjustment controls when you want to manually set the tonal values of the shadows, midtones, and highlights in an image. By default, Aperture sets 0 as pure black and 1 as pure white. Constraining the white and black point values evenly redistributes the tonal range of the pixels between black and white. Reapportioning the luminance values increases the tonal range and contrast in the image. However, if you clip too far into either the black or white tonal values, tonal values that were originally *near* pure black and pure white are now changed to pure black and pure white, resulting in lost image detail.

To simplify your workflow, you can use the Auto Levels buttons in the Levels adjustment to analyze the image and adjust the levels based on that analysis. This is a good way to make a quick correction to an image before fine-tuning the Levels adjustment with the manual adjustment controls.

There are two ways to perform an Auto Levels adjustment. For more information, see the following sections:

- [Automatically Adjusting Luminance](#) on page 368
- [Automatically Adjusting RGB Channels](#) on page 369

You can also adjust the tolerance of the white and black clipping points of the Auto Levels adjustment. For more information, see [Setting the Auto Levels Options](#) on page 370.

In addition to adjusting the tonal values of an image for overall shadows, midtones, and highlights, you can also color correct an image by adjusting the levels of the red, green, and blue channels independently. Aperture provides a way to adjust levels for each color channel, allowing you to control the color tonality in an image.

You can also brush the Levels adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Automatically Adjusting Luminance

When you want to quickly adjust the levels of an image based on total luminance values—red, green, and blue channels combined—you choose Luminance from the Channel pop-up menu in the Levels adjustment and then click the Auto Levels Combined button. Red, green, and blue channels are adjusted by the same amount based on the total luminance. You use the Auto Levels Combined button for luminance when you want to correct the contrast of the image without modifying the color cast of the image.



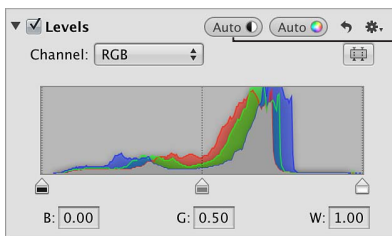
Before Auto Levels Combined adjustment



After Auto Levels Combined adjustment

To automatically adjust the levels of an image based on total luminance

- 1 Select a photo.
- 2 In the Levels area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Luminance from the Channel pop-up menu, then click the Auto Levels Combined button.



Click the Auto Levels Combined button to automatically set the levels for the photo based on the combined luminance of all three color channels.

The levels of the image are automatically adjusted. To fine-tune the Levels adjustment, see [Adjusting the Luminance Levels in an Image](#) on page 372.

Automatically Adjusting RGB Channels

When you want to automatically adjust the levels of an image based on individual evaluations of the red, green, and blue channels, you use the Auto Levels Separate button in the Levels adjustment. Red, green, and blue channels are adjusted based on the evaluation of each channel. You use the Auto Levels Separate button when you want to correct the color cast in the image in addition to correcting the contrast.

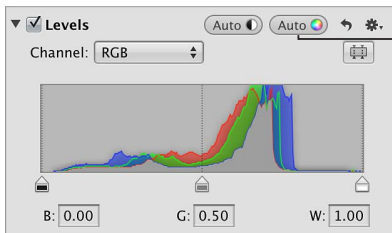


Before Auto Levels Separate adjustment

After Auto Levels Separate adjustment

To automatically adjust the levels based on an evaluation of each color channel

- 1 Select a photo.
- 2 In the Levels area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose RGB from the Channel pop-up menu, then click the Auto Levels Separate button.



Click the Auto Levels Separate button to automatically set the levels for the photo based on an evaluation of each color channel's luminance values.

The levels of the image are automatically adjusted for each color channel. To fine-tune the levels adjustment, see [Adjusting the Luminance Levels in an Image](#) on page 372.

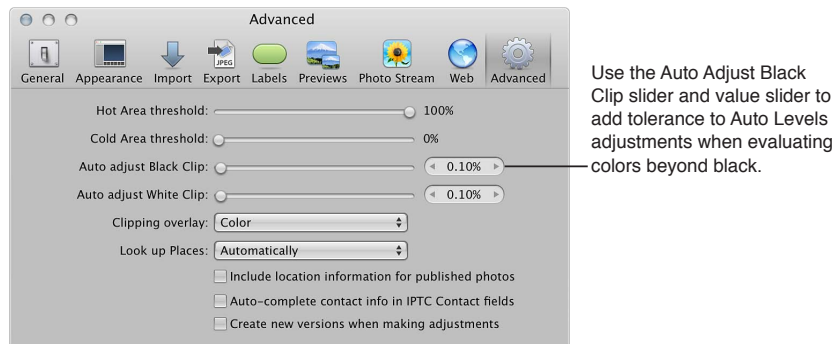
Setting the Auto Levels Options

Aperture provides the option to set both the black and white clipping point parameters for the Auto Levels adjustments. Modifying the black and white clipping points from their default value of 0% expands the tonal range of the image. One reason for expanding the tonal range of an image is to preserve shadow and highlight detail when the image is printed.

Note: You may have to perform a few print tests to determine the output characteristics of your printer before settling on final values for black and white clipping points.

To adjust the black clipping point

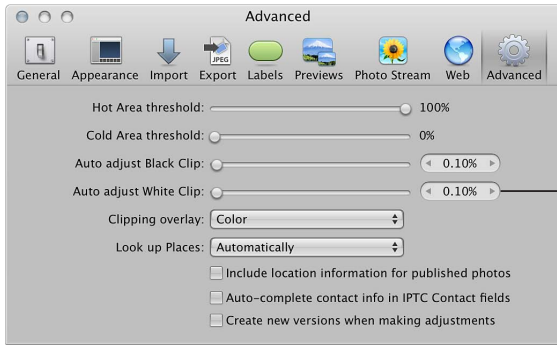
- 1 Choose Aperture > Preferences, then click Advanced.



- 2 In the Advanced pane, do one of the following:
 - By default, the Auto Adjust Black Clip slider is set to the left side of the slider control. Drag the slider to the right to increase the tolerance of Auto Levels adjustments to colors beyond the analyzed black point in the image, and drag the slider back to the left to reduce the tolerance.
 - By default, the Auto Adjust Black Clip value slider is set to 0.10%. Double-click the number in the value slider, then enter a value from 0% to 10% and press Return.
 - Click the left or right arrow in the value slider to change the tolerance of Auto Levels adjustments to colors beyond the analyzed black point in the image, or drag in the value field. Clicking the left arrow reduces the tolerance, and clicking the right arrow increases it.
- 3 Once the black clipping point is adjusted, click either the Auto Levels Combined or the Auto Levels Separate button in the Levels area of the Adjustments inspector or the Adjustments pane of the Inspector HUD to view the effect on the image.

To adjust the white clipping point

- 1 Choose Aperture > Preferences, then click Advanced.



Use the Auto Adjust White Clip slider and value slider to add tolerance to Auto Levels adjustments when evaluating colors beyond white.

- 2 In the Advanced pane, do one of the following:
 - By default, the Auto Adjust White Clip slider is set to the left side of the slider control. Drag the slider to the right to increase the tolerance of Auto Levels adjustments to colors beyond the analyzed white point in the image, and drag the slider back to the left to reduce the tolerance.
 - By default, the Auto Adjust White Clip value slider is set to 0.10%. Double-click the number in the value slider, then enter a value from 0% to 10% and press Return.
 - Click the left or right arrow in the value slider to change the tolerance of Auto Levels adjustments to colors beyond the analyzed white point in the image, or drag in the value field. The left arrow reduces the tolerance, and the right arrow increases it.
- 3 Once the white clipping point is adjusted, click either the Auto Levels Combined or the Auto Levels Separate button in the Levels area of the Adjustments inspector or the Adjustments pane of the Inspector HUD to view the effect on the image.

Adjusting the Luminance Levels in an Image

When you want to adjust the overall tonality of an image, you use the Levels adjustment controls based on a histogram that shows luminance. When the histogram is set to show luminance, it displays the cumulative brightness values for all three color channels for each pixel.

To adjust levels in an image based on luminance

You use the histogram's luminance view when you want to adjust an image's tonal values without affecting the color cast.

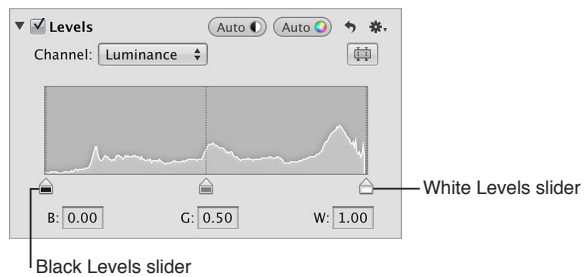


Before Levels adjustment

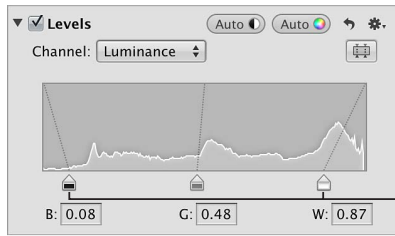
After Levels adjustment

- 1 Select a photo.
- 2 To turn on the Levels histogram, select the Levels checkbox in the Levels area of the Adjustments inspector or the Adjustments pane of the Inspector HUD.

The Levels histogram appears.



- 3 Choose Luminance from the Channel pop-up menu.
- 4 Do one of the following:
 - Drag the Black Levels and White Levels sliders to where they touch the outside of the histogram graph, constraining the image to its new black and white points.



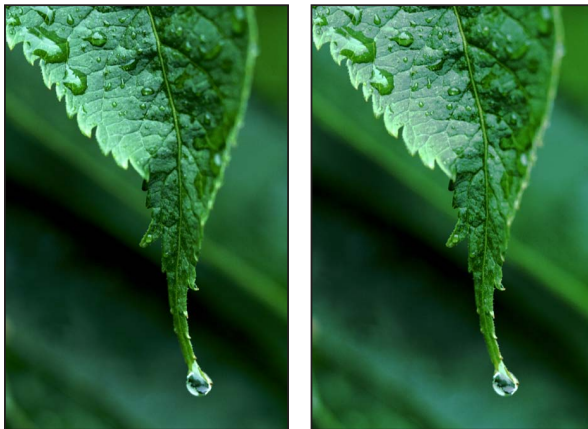
Drag the Black Levels and White Levels sliders to where they touch the outside of the histogram graph.

- Select the numbers in the Black (B) and White (W) fields, then enter a value from 0.00 to 1.00. By default, the black point is set to 0.00, and the white point is set to 1.00.

The tonal values for shadows and highlights in the image are updated, resulting in more defined blacks and highlight values as well as increased overall contrast.

To adjust the midtone levels in an image

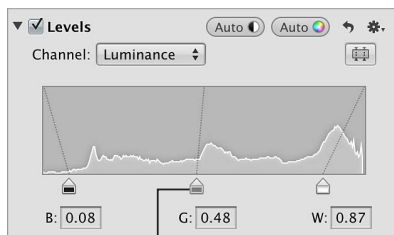
You can also use the Gray Levels slider if you need to adjust the brightness values of the midtones while limiting the brightening effect in the black and white points. The brighter areas of shadows and the darker areas of highlights are affected, but the effect tapers off as it nears the dark blacks and bright whites.



Before Gray Levels adjustment After Gray Levels adjustment

Do one of the following:

- Drag the Gray Levels slider until the brightness values in the image's midtones are correct.



Gray Levels slider

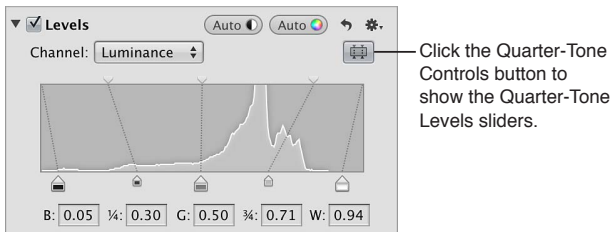
- By default, the gray point is set to 0.50. Select the number in the Gray (G) field, then enter a value from 0.02 to 0.98 to correct the brightness values in the image's midtones.

Showing Quarter-Tone Levels Controls

When you need additional control over tonal values between the midtones and shadows as well as the midtones and highlights, you use the Quarter-Tone Levels controls in the Levels area of the Adjustments inspector or the Adjustments pane of the Inspector HUD. For example, if you need to add contrast to the midtone values independently of the black and white point settings, you use the Quarter-Tone Levels sliders. Unlike the Black Levels and White Levels sliders, Quarter-Tone Levels sliders are independent and affect only the tonal range of the pixels they represent: either shadows to midtones or midtones to highlights.

To show the Quarter-Tone Levels controls

- Click the Quarter-Tone Controls button.



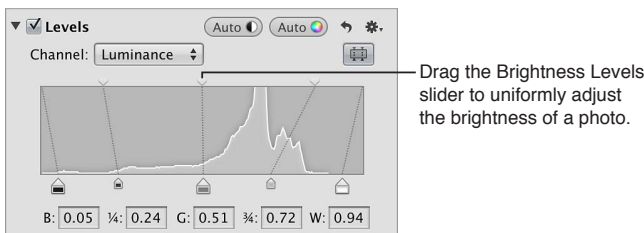
Adjusting the Brightness of an Image

You can also use the Levels adjustment controls to adjust the brightness of an image. When you adjust the brightness of the image, you can then use the Black Levels, Gray Levels, and White Levels sliders modify the tonality of the image based on the new brightness value.

For more information about adjusting the tonality of the image, see [Adjusting the Luminance Levels in an Image](#) on page 372.

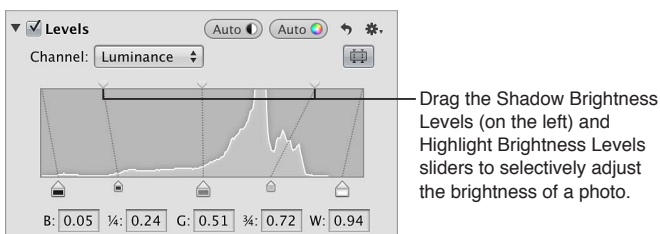
To uniformly adjust the brightness of the image

- In the Levels area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, drag the Brightness Levels slider until the brightness of the entire image is correct.



To selectively adjust the brightness of the shadows and highlights in an image

- Drag the Shadow Brightness Levels and Highlight Brightness Levels sliders until the brightness values of the shadows and highlights in the image are correct.

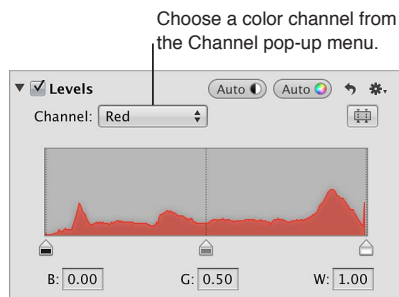


Using Levels for Color Correction

A powerful way to color correct an image is to adjust the levels of each color channel in the image. Adjusting the levels of each color channel is useful for removing color casts in an image. It's important to understand that you're adjusting the colors of the image within the RGB spectrum; therefore, you reduce yellow when you increase blue, you reduce magenta when you increase green, and so on.

To adjust the levels of a single color channel in an image

- 1 In the Levels area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose a color channel from the Channel pop-up menu.



- 2 Drag the Black Levels, Gray Levels, and White Levels sliders (or enter values in the corresponding fields) to create the effect you want.

For a description of how adjusting the levels of the red, green, and blue color channels affects the image, see:

- [Adjusting the Levels of the Red Color Channel](#) on page 375
- [Adjusting the Levels of the Green Color Channel](#) on page 376
- [Adjusting the Levels of the Blue Color Channel](#) on page 376

Adjusting the Levels of the Red Color Channel

You adjust the levels of the red color channel when you want to remove red and cyan color casts in the image.



Before Red Levels adjustment



After Red Levels adjustment
(moved Gray Levels slider right)

Red adjustment	Effect
Move Black Levels slider right.	Adds cyan to the shadows, removing red.
Move Gray Levels slider left.	Adds red to the midtones, removing cyan.
Move Gray Levels slider right.	Adds cyan to the midtones, removing red.
Move White Levels slider left.	Adds red to the highlights, removing cyan.

Adjusting the Levels of the Green Color Channel

You adjust the levels of the green color channel when you want to remove green and magenta color casts in the image.



Before Green Levels adjustment

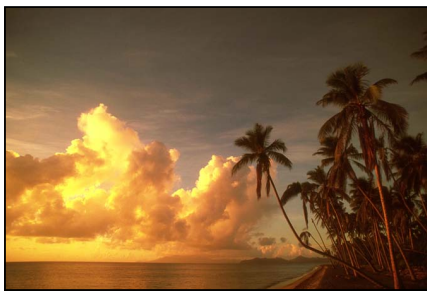


After Green Levels adjustment
(moved Gray Levels slider right)

Green adjustment	Effect
Move Black Levels slider right.	Adds magenta to the shadows, removing green.
Move Gray Levels slider left.	Adds green to the midtones, removing magenta.
Move Gray Levels slider right.	Adds magenta to the midtones, removing green.
Move White Levels slider left.	Adds green to the highlights, removing magenta.

Adjusting the Levels of the Blue Color Channel

You adjust the levels of the blue color channel when you want to remove blue and yellow color casts in the image.



Before Blue Levels adjustment



After Blue Levels adjustment
(moved White Levels and Gray Levels sliders left)

Blue adjustment	Effect
Move Black Levels slider right.	Adds yellow to the shadows, removing blue.
Move Gray Levels slider left.	Adds blue to the midtones, removing yellow.
Move Gray Levels slider right.	Adds yellow to the midtones, removing blue.
Move White Levels slider left.	Adds blue to the highlights, removing yellow.

Working with the Color Controls

An Overview of the Color Adjustment

You use the Color adjustment controls to selectively adjust the red, green, blue, cyan, magenta, and yellow colors in an image. Each color has individual Hue, Saturation, and Luminance controls. If you need to adjust the hue, saturation, and luminance of a color that does not appear in the Color controls, you can use the Color eyedropper to identify a hue in the image that needs adjusting.

Although segmenting control of hue, saturation, and luminance on a per-color basis may seem complicated at first, restricting these adjustments to specific colors helps correct and enhance targeted colors without affecting others. In addition, Aperture provides Range controls used to set the extent of colors affected by the Hue, Saturation, and Luminance adjustments. The extent of colors affected by these adjustments is also known as *chromatic spread*. You use the Range controls to fine-tune your color adjustments.



Before Color adjustment

After Color adjustment
(adjusted the hue and
saturation of blue)

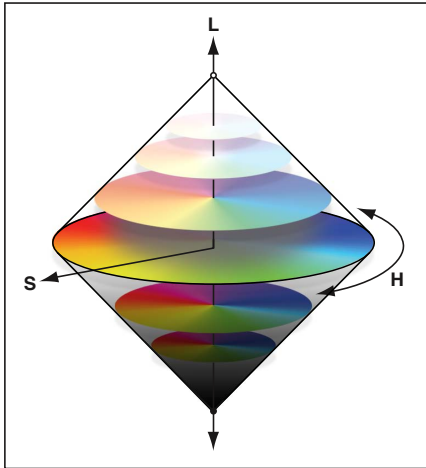
You can also brush the Color adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

About Hue, Saturation, and Luminance

Hue (H) describes the actual color itself. Hue is measured as an angle on a color wheel. Moving a Hue slider in Aperture remaps the color from its original position on the color wheel to the new position indicated by the slider. Hue adjustments are often made to match the color of the same subject in different images. Adjusting the hue of an image is particularly useful when the subject you shot moved between various lighting conditions. Another advantage of adjusting the hue of an image is that camera models of different types or from different manufacturers rarely capture and render color exactly the same way. You can use the Hue controls to match the color of a subject shot by two different cameras, so that when the images are placed side by side, they match.

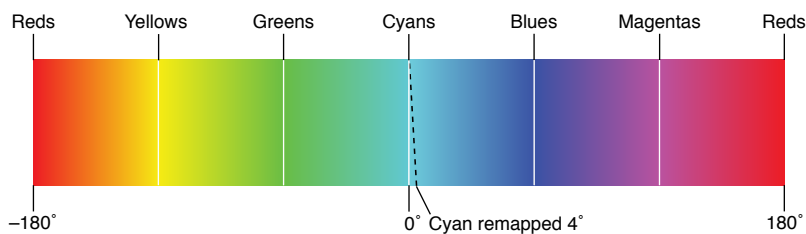
Saturation (S) defines the intensity of a specific hue. A saturated hue gives the color a vivid and pure appearance. A less saturated hue appears flatter and more gray. A completely desaturated hue becomes a shade of gray.

Luminance (L) describes the brightness of the selected color. An increase in luminance brightens the selected color value. A maximum Luminance adjustment results in pure white. Conversely, a decrease in luminance darkens the selected color. A minimum Luminance adjustment results in pure black.



Adjusting the Color of the Image with the Color Controls

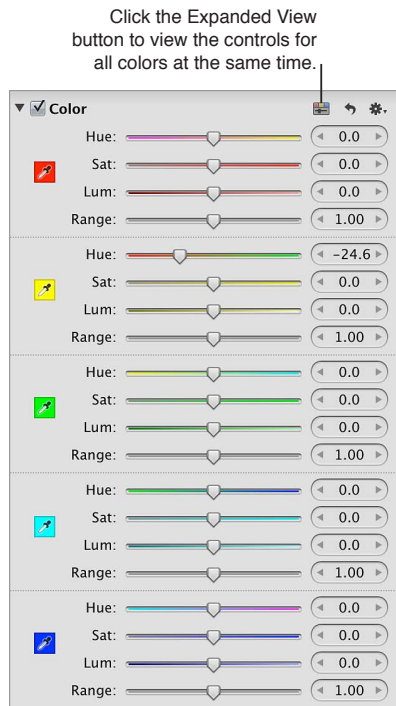
When you want to adjust the color values in an image, you must first identify the colors that have the most influence on the colors you want to change. It's important to understand that you're adjusting the colors of the image within the RGB spectrum; therefore, you reduce yellow when you increase blue, you reduce magenta when you increase green, and so on. When you want to isolate a color and adjust its hue, it's important to identify the color's location on the color wheel. For example, if the color value is closer to cyan than blue, you may decide to adjust the cyan Hue value without adjusting the blue Hue value. Depending on the image, you may decide to adjust both the cyan and blue Hue values to achieve the color values you're looking for. There's not just one correct way of perfecting the colors in an image. Your approach should be based on the image's subject and the overall aesthetic you want to achieve.



To adjust a color value in an image

- 1 Select a photo.
- 2 In the Color area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the color button that corresponds to the color you want to adjust to view its Hue, Saturation, Luminance, and Range controls.

Note: You can also click the Expanded View button to expand the Color area to show the controls for all colors at the same time.



- 3 If a Hue adjustment is necessary, adjust the Hue parameter by doing one of the following:
- By default, the Hue slider is set to the center of the slider control. Drag the Hue slider to the left or right to change the hue of the selected color.
 - Click the left or right arrow in the Hue value slider to change the hue of the selected color in the image by single increments, or drag in the value field.

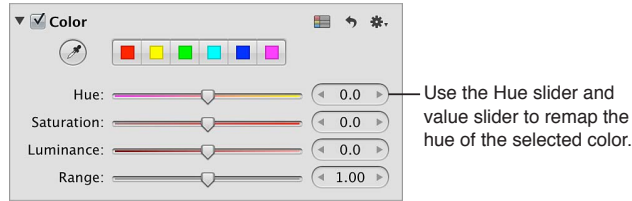
The left arrow remaps the hue in the following ways:

- Red Hue value moves toward magenta.
- Yellow Hue value moves toward red.
- Green Hue value moves toward yellow.
- Cyan Hue value moves toward green.
- Blue Hue value moves toward cyan.
- Magenta Hue value moves toward blue.

The right arrow remaps the hue in the following ways:

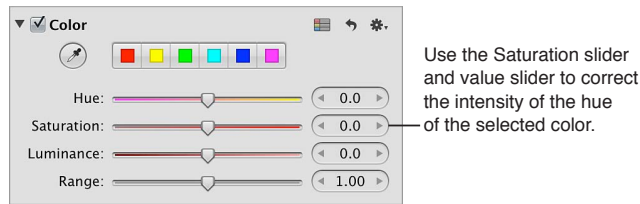
- Red Hue value moves toward yellow.
- Yellow Hue value moves toward green.
- Green Hue value moves toward cyan.
- Cyan Hue value moves toward blue.
- Blue Hue value moves toward magenta.
- Magenta Hue value moves toward red.

- By default, the Hue value slider is set to 0.0. Double-click the number in the value slider, then enter a value from -180.0 to 180.0 and press Return.



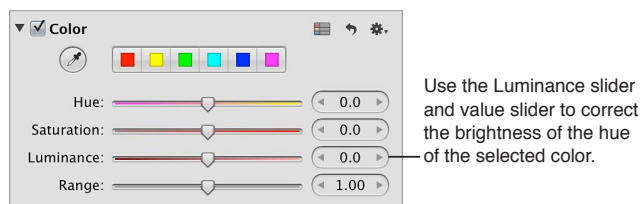
4 If a Saturation adjustment is necessary, adjust the Saturation parameter by doing one of the following:

- By default, the Saturation slider is set to the center of the slider control. Drag the slider to the left to desaturate the selected color, or drag the slider to the right to increase the saturation of the selected color.
- Click the left or right arrow in the Saturation value slider to change the saturation of the selected color in the image by single increments, or drag in the value field.
- By default, the Saturation value slider is set to 0.0. Double-click the number in the value slider, then enter a value from -100.0 to 100.0 and press Return.



5 If a Luminance adjustment is necessary, adjust the Luminance parameter by doing one of the following:

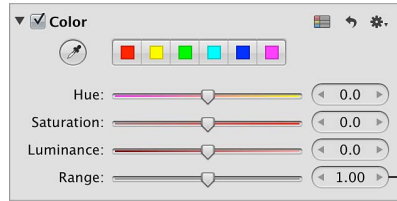
- By default, the Luminance slider is set to the center of the slider control. Drag the slider to the left to decrease the brightness of the selected color, or drag the slider to the right to increase the brightness.
- Click the left or right arrow in the Luminance value slider to change the brightness of the selected color in the image by single increments, or drag in the value field.
- By default, the Luminance value slider is set to 0.0. Double-click the number in the value slider, then enter a value from -100.0 to 100.0 and press Return.



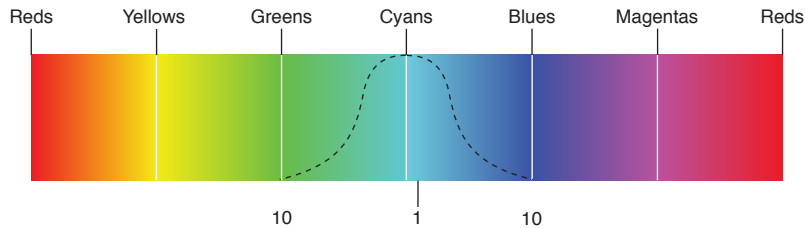
6 The Range parameter limits or expands the chromatic range of the adjustment. Adjust the Range parameter by doing one of the following:

- By default, the Range slider is set to the center of the slider control. Drag the slider to the left to decrease the range of the selected color, or drag the slider to the right to increase the range.
- Click the left or right arrow in the Range value slider to change the chromatic range of the selected color by 10 percent increments, or drag in the value field.

- Double-click the number in the value slider, then enter a value from 0.00 to 20.00 and press Return.



By default, the Range value slider is set to 1.00.



You can adjust the chromatic range up to 20. The default spread is 1.

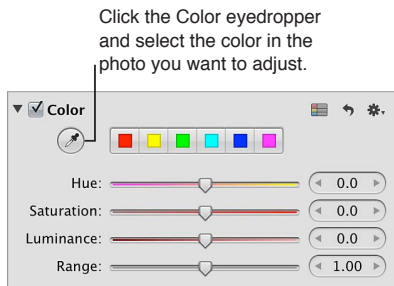
- 7 Repeat steps 2 through 6 until you are satisfied with the appearance of the colors in your image.

Adjusting Custom Colors Using the Color Eyedropper

If you require a specific hue as a starting point for your color adjustment, you can use the Color eyedropper to identify a hue in the image.

To adjust a custom color value in an image

- 1 Select a photo.
- 2 In the Color area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, click the color button with the hue closest to the one you plan to adjust, then select the Color eyedropper tool.



The pointer changes to an eyedropper, and the Loupe appears, showing a magnified view of the target area. By default, the Loupe is set to magnify the image to 100 percent (full size). If necessary, you can increase the magnification of the Loupe by pressing Command–Shift–Plus Sign (+). For more information about the Loupe, see [An Overview of the Loupe](#) on page 89.

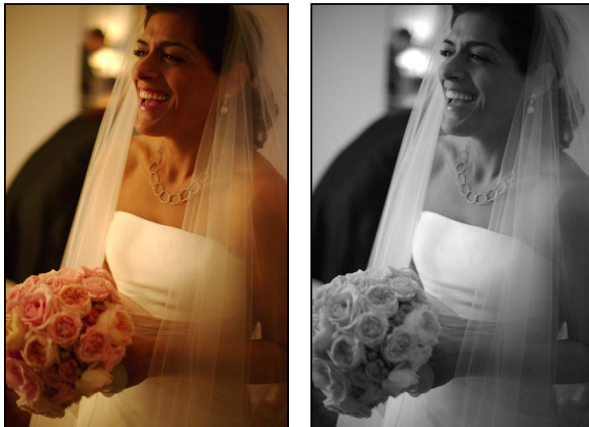
- 3 Position the eyedropper over the color in the image that you want to adjust, then click.



The new hue is selected and becomes the starting point for color adjustments of that hue. For more information about Color adjustments, see [Adjusting the Color of the Image with the Color Controls](#) on page 378.

Working with the Black & White Controls

You use the Black & White adjustment controls when you want more control over converting your image from color to black and white than simply desaturating it gives you. The Black & White adjustment controls allow you to adjust tonal relationships and contrast in an image by adjusting the red, green, and blue channels independently. The effects of a Black & White adjustment are similar to the effects of attaching a color filter to a camera lens and shooting black-and-white film.



Before Black & White adjustment After Black & White adjustment

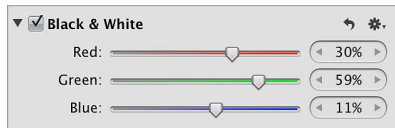
The key to the successful use of the Black & White adjustment controls is to experiment with changing values for the Red, Green, and Blue parameters until you are satisfied with the effect on the image.

Note: A good rule of thumb is to keep the total percentage of the red, green, and blue channels at or below 100 percent to prevent you from blowing out the highlights in your image.

To convert a color image to black and white using the Black & White controls

- 1 Select a photo.
- 2 If the Black & White controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Black & White from the Add Adjustment pop-up menu (or press Control-M).

- Adjust the mixture of red, green, and blue channels by doing one of the following:
 - Drag a color slider to the left to decrease the color's percentage in the color mix, or drag the slider to the right to increase the percentage.
 - Click the left or right arrows in the value sliders to modify the percentages by single increments, or drag in the value fields.
The left arrows decrease the percentage, and the right arrows increase it.
 - Double-click the number in a value slider, then enter a value from -100% to 200% and press Return.



Use the Red, Green, and Blue sliders and value sliders to manually adjust the mix of color channels.

The tonal and contrast values in your black-and-white image are set.

You can also brush the Black & White adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Working with the Color Monochrome Controls

The Color Monochrome adjustment controls are useful when you want to perform a basic conversion from color to black and white while simultaneously applying a color tint to the image's midtones.



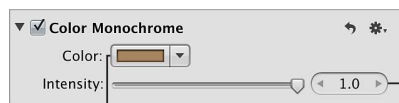
Before Color Monochrome adjustment



After Color Monochrome adjustment
(applied blue tint)

To convert a color image to black and white with a color tint

- Select a photo.
- If the Color Monochrome controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Color Monochrome from the Add Adjustment pop-up menu.



Use the Intensity slider and value slider to adjust the strength of the color tint applied to the photo.

Click in the Color well to select a color from the Colors window.

- Click the Color well and then choose a new tint color from the Colors window, or click the disclosure button (to the right of the color well) and choose a new tint color from the pop-up color palette.

The selected color appears in the Color well and tints the midtones in the image.

- 4 By default, the color intensity is set to the maximum value of 1.0. Adjust the intensity of the color tint by doing one of the following:
- Drag the Intensity slider to the left to decrease the intensity of the color in the image's midtones, or drag the slider back to the right to increase the intensity.
 - Click the left or right arrow in the Intensity value slider to modify the intensity by 5 percent increments, or drag in the value field.
The left arrow decreases the intensity, and the right arrow increases it.
 - Double-click the number in the Intensity value slider, then enter a value from 0.0 to 1.0 and press Return.

The image is converted to black and white, with the selected color tint applied to the midtones. You can also brush the Color Monochrome adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Working with the Sepia Tone Controls

The Sepia Tone adjustment controls behave similarly to the Color Monochrome controls, except that the sepia color is already selected.



Before Sepia Tone adjustment



After Sepia Tone adjustment

To apply a sepia tint to an image

- 1 Select a photo.
- 2 If the Sepia Tone controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Sepia Tone from the Add Adjustment pop-up menu.



- 3 By default, the intensity of the sepia color is set to the maximum value of 1.0. Adjust the intensity of the sepia color by doing one of the following:
 - Drag the Intensity slider to the left to decrease the intensity of the sepia color in the image's midtones, or drag the slider back to the right to increase the intensity.
 - Click the left or right arrow in the Intensity value slider to modify the intensity by 5 percent increments, or drag in the value slider.
The left arrow decreases the intensity, and the right arrow increases it.
 - Double-click the number in the Intensity value slider, then enter a value from 0.0 to 1.0 and press Return.

The image is converted to black and white, with the sepia color tint applied to the midtones. You can also brush the Sepia Tone adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Working with the Sharpen and Edge Sharpen Controls

An Overview of the Sharpen and Edge Sharpen Adjustments

Aperture provides two sharpening adjustments that you can use to sharpen the detail in your image: Sharpen and Edge Sharpen.

If you've already applied sharpening in a previous version of Aperture using the Sharpen adjustment controls, the Sharpen adjustment controls are still there so that your adjustments remain intact and unchanged. However, to do further sharpening on other images, it is recommended that you use the Edge Sharpen adjustment controls, which generally offer more precise control over how sharpening is applied. For more information, see [Working with the Edge Sharpen Controls](#) on page 385.

Working with the Edge Sharpen Controls

You use the Edge Sharpen controls when you want to sharpen the detail in your image. Images shot with digital image sensors are often a bit soft in focus because of the demosaic filter applied by the camera's processor. The Edge Sharpen controls adjust the luminance values in the image, increasing the contrast between light and dark pixels that touch, creating an "edge." Increasing the contrast between these neighboring light and dark pixels gives the image a crisper, or sharper, appearance. You also use the Edge Sharpen controls when you make noise-reduction adjustments, so that the image retains detail and crisp edges that might otherwise be obscured by the effect of the noise-reduction adjustment.



Before Edge Sharpen adjustment

After Edge Sharpen adjustment

Important: The Edge Sharpen controls are not designed to correct images that were shot out of focus. They are designed to help mitigate the effects of the camera's demosaic filter, as well as maintain image detail when noise-reduction adjustments are applied. Edge Sharpen adjustments can also compensate for the softening that occurs with some printing processes.

To sharpen an image using the Edge Sharpen controls

- 1 Select a photo.
- 2 If the Edge Sharpen controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Edge Sharpen from the Add Adjustment pop-up menu (or press Control-S).

3 Sharpen the image by doing one of the following:

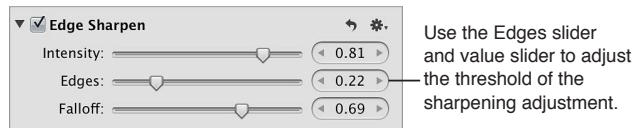
- Drag the Intensity slider to the right to increase the amount of sharpening applied to the image, and drag the slider back to the left to reduce the amount of sharpening.
- Click the left or right arrow in the Intensity value slider to adjust the sharpening by 5 percent increments, or drag in the value field. The left arrow decreases the sharpening effect on the image, and the right arrow increases it.
- Double-click the number in the Intensity value slider, then enter a value from 0.0 to 1.0 and press Return.



A value of 0.0 applies no sharpening adjustment to the image. A value greater than 0.0 increases the sharpening adjustment applied to the image.

4 Adjust the threshold for determining which pixels are edges and which ones are not by doing one of the following:

- Drag the Edges slider to the right to increase the area over which the sharpening effect is applied, and drag the Edges slider back to the left to reduce it.
- Click the left or right arrow in the Edges value slider to adjust the area over which the sharpening effect is applied by 5 percent increments, or drag in the value field.
- Double-click the number in the Edges value slider, then enter a value from 0.0 to 1.0 and press Return.



A value of 0.0 applies no sharpening adjustment to the image. A value greater than 0.0 increases the number of pixels that qualify as edges.

Note: If you observe digital noise beginning to increase in flat areas of the image (areas with little or no contrast), decrease the Edges parameter setting.

5 For maximum accuracy, the Edge Sharpen adjustment sharpens the image in three passes that appear to occur simultaneously—an initial sharpening pass, where a majority of the sharpening occurs, followed by two subsequent sharpening passes. These subsequent passes are called *falloff*. Adjust the amount of sharpening applied in the subsequent sharpening passes by doing one of the following:

- Drag the Falloff slider to the right to increase the percentage of the original sharpening that's applied during the subsequent sharpening passes, and drag the slider back to the left to reduce it.
- Click the left or right arrow in the Falloff value slider to adjust the falloff percentage by 5 percent increments, or drag in the value field.

- Double-click the number in the Falloff value slider, then enter a value from 0.0 to 1.0 and press Return.



The falloff percentage is applied proportionally to the second and third sharpening passes. For example, if 0.69 (69 percent) is set as the Falloff parameter value, 69 percent of the original amount of sharpening is applied during the second sharpening pass, and 69 percent of the amount of sharpening from the second sharpening pass is applied during the third sharpening pass. In other words, only 47.6 percent of the amount of the original sharpening is applied during the third sharpening pass.

You can also brush the Edge Sharpen adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Understanding the Edge Sharpen Workflow

The Edge Sharpen adjustment in Aperture is a professional tool that's used to sharpen photos. Using the Edge Sharpen adjustment controls in conjunction with the following workflow makes it easy to achieve professional results.

To sharpen an image

- 1 In the Edge Sharpen area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, set the Intensity slider to the maximum value to see the effect of the operation.
- 2 Adjust the Edges slider so you can see which parts of the image are being sharpened.
If possible, adjust the Edges slider so that edges are sharpened, but noise and texture in the image are not affected.
- 3 Adjust the Falloff slider so that the edge sizes you want sharpened the most are accentuated.
- 4 Decrease the Intensity parameter value until the sharpening effect is appropriately subtle.

Values below 0.5 usually work best.

Working with the Sharpen Controls

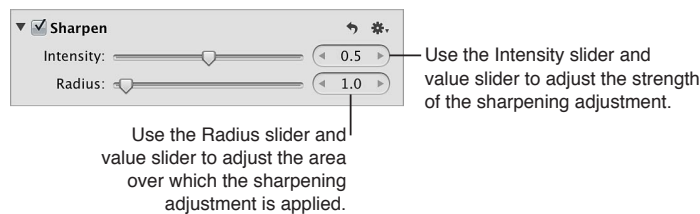
You use the Sharpen adjustment controls when you need to modify Sharpen adjustment parameter settings that were applied to an image in a previous version of Aperture.

To sharpen an image using the Sharpen controls

- 1 Select a photo.
- 2 If the Sharpen controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Sharpen from the Add Adjustment pop-up menu.
- 3 Sharpen the image by doing one of the following:
 - By default, the Intensity slider is set to 0.5. Drag the Intensity slider to the right to increase the amount of sharpening applied to the image, and drag the slider back to the left to reduce the amount of sharpening.
 - Click the left or right arrow in the Intensity value slider to adjust the sharpening by 5 percent increments, or drag in the value field.

The left arrow decreases the sharpening effect on the image, and the right arrow increases it.

- Double-click the number in the Intensity value slider, then enter a value from 0.0 to 1.0 and press Return.



A value of 0.0 applies no sharpening adjustment to the image. A value greater than 0.0 increases the sharpening adjustment to the image.

- 4 Adjust the area over which the sharpening adjustment is applied (the distance, in pixels, that Aperture goes from each pixel to evaluate sharpness) by doing one of the following:
 - By default, the Radius slider is set to 1.0 pixels. Drag the Radius slider to the right to increase the area over which the sharpening effect is applied, and drag the Radius slider back to the left to reduce it.
 - Click the left or right arrow in the Radius value slider to adjust the Radius pixel distance by 5 percent increments, or drag in the value field.
 - Double-click the number in the Radius value slider, then enter a value from 0.0 to 20.0 and press Return.

A value of 0.0 applies no sharpening adjustment to the image. A value greater than 0.0 increases the area over which the sharpening adjustment is applied.

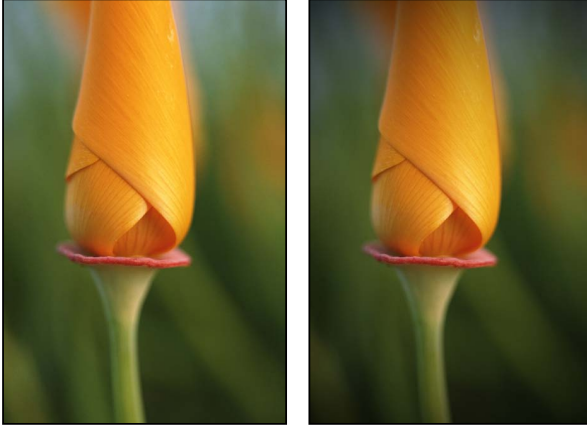
As you change the parameter values, the image is updated to display the sharpening effect.

You can also brush the Sharpen adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

Working with the Vignette Controls

You use the Vignette adjustment controls to apply a vignette to an image. The term *vignette* describes an image whose brightness fades to its periphery from its center. Vignettes are usually applied to an image after it is shot, for artistic effect. Aperture provides two types of vignettes: Exposure and Gamma.

The Exposure vignette is designed to simulate a lens-created vignette.



Before Exposure Vignette adjustment

After Exposure Vignette adjustment

The Gamma vignette is designed for artistic effect and applies a gamma adjustment to the affected pixels within the vignette. Because the Gamma vignette intensifies colors in the affected pixels, it creates a more pronounced vignette effect than the Exposure vignette.



Before Gamma Vignette adjustment

After Gamma Vignette adjustment

Note: You can add a vignette to any image cropped in Aperture. The adjustment is applied after the image is cropped.

To apply an Exposure vignette to an image

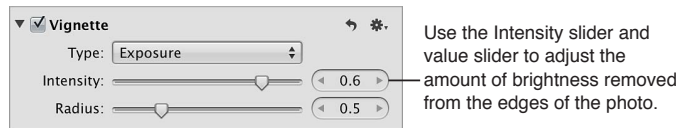
- 1 Select a photo.
- 2 If the Vignette controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Vignette from the Add Adjustment pop-up menu (or press Control-V).
- 3 Choose Exposure from the Type pop-up menu.

4 Adjust the amount of vignette to apply to the image by doing one of the following:

- Drag the Intensity slider to the left to decrease the amount of dark shading applied to the edges of the image, or drag the slider to the right to increase the dark shading.
- Click the left or right arrow in the Intensity value slider to change the amount of dark shading applied to the edges of the image, or drag in the value field.

The left arrow decreases the amount of dark shading applied to the edges of the image, and the right arrow increases the dark shading.

- Double-click the number in the Intensity value slider, then enter a value from 0.0 to 1.0 and press Return.

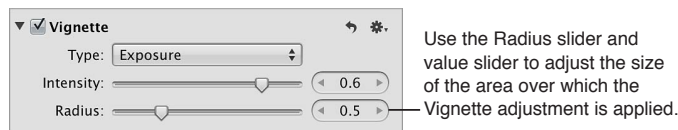


5 To adjust the radius of the vignette, in pixels, do one of the following:

- Drag the Radius slider to the right to increase the dark shading from the edges of the image inward, or drag the slider to the left to limit the dark shading to the edges of the image.
- Click the right or left arrow in the Radius value slider, or drag in the value field.

The right arrow moves the Vignette adjustment toward the center point of the image, and the left arrow limits the Vignette adjustment to the edges of the image.

- Double-click the number in the Radius value slider, then enter a value from 0.0 to 2.0 and press Return.



The Exposure vignette is applied to the image.

You can also brush the Exposure Vignette adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

To apply a Gamma vignette to an image

- 1 Select a photo.
- 2 If the Vignette controls are not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Vignette from the Add Adjustment pop-up menu (or press Control-V).
- 3 Choose Gamma from the Type pop-up menu.

4 Adjust the amount of vignette to apply to the image by doing one of the following:

- Drag the Intensity slider to the left to decrease the amount of dark shading applied to the edges of the image, or drag the slider to the right to increase the dark shading.
- Click the left or right arrow in the Intensity value slider to change the amount of dark shading applied to the edges of the image, or drag in the value field.

The left arrow decreases the amount of dark shading applied to the edges of the image, and the right arrow increases the dark shading.

- Double-click the number in the Intensity value slider, then enter a value from 0.0 to 1.0 and press Return.



5 To adjust the radius of the vignette, in pixels, do one of the following:

- Drag the Radius slider to the right to increase the dark shading from the edges of the image inward, or drag the slider to the left to limit the dark shading to the edges of the image.
- Click the right or left arrow in the Radius value slider, or drag in the value field.

The right arrow moves the Vignette adjustment toward the center point of the image, and the left arrow limits the Vignette adjustment to the edges of the image.

- Double-click the number in the Radius value slider, then enter a value from 0.0 to 2.0 and press Return.



The Gamma vignette is applied to the image.

You can also brush the Gamma Vignette adjustment on selected parts of an image. For more information, see [An Overview of Brushed Adjustments](#) on page 392.

For information about removing a vignette that was applied to an image when it was shot, see [Working with the Devignette Controls](#) on page 327.

To switch vignette types

You can switch the type of vignette that's applied to an image and maintain the Intensity and Radius parameter values you set using the previous vignette type.

- Choose the other vignette type from the Type pop-up menu.

The new vignette is applied to the image, but the Intensity and Radius parameters maintain their settings.

Making Brushed Adjustments

17

An Overview of Brushed Adjustments

In Aperture, you can make adjustments to specific portions of your images with brushes to selectively correct and enhance your photos. Most adjustments in Aperture can be brushed on images. You simply specify the parameter settings for an adjustment, previewing the effect of the adjustment on the entire image, and then choose to either brush the adjustment “in” or brush the adjustment “away” using the adjustment’s Action pop-up menu.

You brush an adjustment in when you want to apply the adjustment to a specific portion of the image rather than the whole image. When you choose to brush an adjustment in, the adjustment is applied to specific portions of the image as you brush it on.



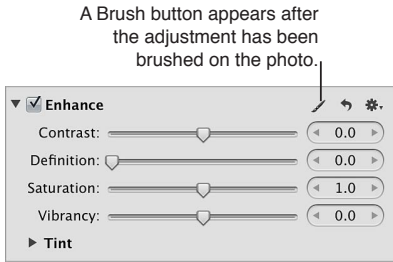
A plus sign (+) indicates that you’re brushing the adjustment in.

You brush an adjustment away when the area you want to apply the adjustment to is larger than the area you don’t want the adjustment applied to. When you choose to brush an adjustment away, Aperture applies the adjustment to the entire image, and you use the eraser brush to remove the adjustment from the areas of the image that don’t need the adjustment.



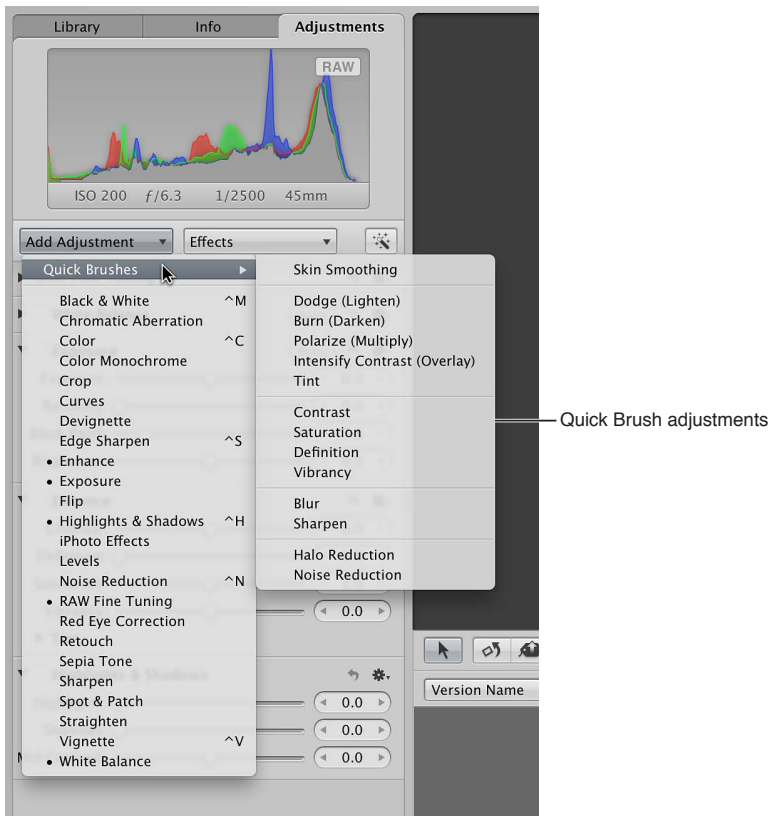
A minus sign (-) indicates that you’re brushing the adjustment away (erasing).

When you brush an adjustment on an image, a Brush button appears at the top of the adjustment controls for that adjustment.

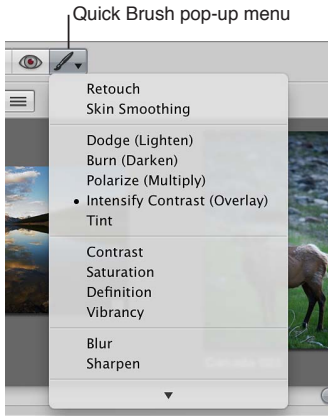


Aperture also provides Quick Brush adjustments that have been specifically designed for brushing on images. Using Quick Brush adjustments, you brush an adjustment on the image and then modify the adjustment's parameter settings. Several of the adjustments and adjustment parameters in Aperture have Quick Brush equivalents: Noise Reduction, Saturation, Sharpen, Contrast, and Vibrancy.

However, a few Quick Brush adjustments are uniquely designed to fix imperfections best remedied with selective brushing. Examples are Halo Reduction and Skin Smoothing. When you identify the area of an image that is ideally suited for a Quick Brush adjustment, you choose the appropriate Quick Brush from the Add Adjustment pop-up menu in either the Adjustments inspector or the Adjustments pane of the Inspector HUD.



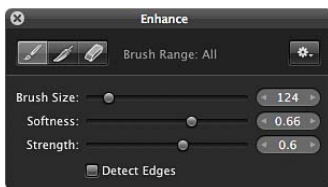
You can also choose a Quick Brush adjustment from the Quick Brush pop-up menu in the tool strip of the Aperture main window or in the Full Screen view toolbar.



Each time you choose a Quick Brush adjustment from the Add Adjustment pop-up menu or the Quick Brush pop-up menu, the adjustment controls for the Quick Brush adjustment appear in the Adjustments inspector (and the Adjustments pane of the Inspector HUD, if both are shown). Some Quick Brush adjustments, such as Retouch, have just a checkbox and a Delete button for removing brush strokes. Other Quick Brush adjustments, such as Definition, have additional parameter controls that allow you to modify the radius and intensity of the adjustment after it has been brushed on the image.



When you choose to brush either a standard adjustment or a Quick Brush adjustment, a Brush HUD for that adjustment appears, and the pointer turns into a brush. You use the controls in the Brush HUD to define the size of the brush, the softness of the brush's edges, and the strength of the brush stroke. In addition to brush controls, the Brush HUD also contains controls for erasing brush strokes, feathering the edges of brush strokes, working with overlays, limiting the adjustment to specific tonal ranges, and detecting edges. When you are satisfied with the settings in the Brush HUD, you can begin brushing the adjustment on the image.



All brushed adjustments are available for use in the Viewer and in Full Screen view, and you can apply a brushed adjustment at any magnification setting. If you prefer to make brushed adjustments with a pen and tablet rather than a mouse, the brushed adjustments are pressure-sensitive.

Important: Brushed adjustments are available only for images using Aperture 3 image processing. For more information about reprocessing your images, see [An Overview of Reprocessing Photos](#) on page 76.

Using Brushed Adjustment Controls

Working with Controls in the Brush HUD

The controls in the Brush HUD are the same for all brushed adjustments except for Retouch.

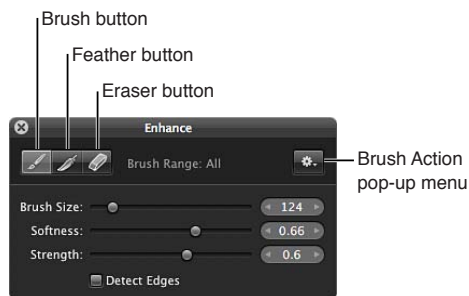
For more information about the Retouch adjustment, see [An Overview of the Retouch Adjustment Controls](#) on page 300.

To show the Brush HUD for an adjustment

Do one of the following:

- In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose either “Brush [*adjustment*] in” or “Brush [*adjustment*] away” from the Action pop-up menu for the adjustment.
- In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes from the Add Adjustment pop-up menu, then choose a Quick Brush adjustment from the submenu.
- Choose a Quick Brush adjustment from the Quick Brush pop-up menu (with a brush icon) in the tool strip.
- In Full Screen view, choose a Quick Brush adjustment from the Quick Brush pop-up menu in the toolbar.

The Brush HUD appears.



- *Brush button*: Click this button to activate the brush.
- *Feather button*: Click this button to feather the edges of previously applied brush strokes.
- *Eraser button*: Click this button to activate the eraser used to remove portions of previously applied brush strokes for the currently selected adjustment.
- *Brush Action pop-up menu*: Choose to apply the brushed adjustment to the entire image, invert the brush strokes, remove all brush strokes, display brush strokes as color overlays, show a white mask with the brush strokes revealing the image underneath, show a black mask with the brush strokes revealing the image underneath, or limit the brushed adjustment to the shadows, midtones, or highlights of the image.
- *Brush Size slider and value slider*: Enter the diameter of the brush using the slider or value slider.
- *Softness slider and value slider*: Enter the softness of the brush’s edge using the slider or value slider.
- *Strength slider and value slider*: Enter the intensity of the brush stroke using the slider or value slider.
- *Detect Edges checkbox*: Select this checkbox to detect edges in the image that the adjustment is brushed over, thereby preserving detail.

Applying Brushed Adjustments

When you want to apply an adjustment to a small portion of an image, you can specify the adjustment parameter settings and then brush the adjustment in.



A plus sign (+) indicates that you're brushing the adjustment in.

When you want to apply an adjustment to most of an image except for a specific portion, you can specify the parameter settings for the adjustment and then brush the adjustment away from the areas of the image you want to exclude. Brushing an adjustment away from an image is the same operation as using the eraser brush.



A minus sign (-) indicates that you're brushing the adjustment away (erasing).

After applying a brushed adjustment to an image, you can still modify the effect of the adjustment on the image. Whether you brushed a standard adjustment or a Quick Brush adjustment, you can modify the adjustment using the controls for that adjustment in the Adjustments inspector or the Adjustments pane of the Inspector HUD.

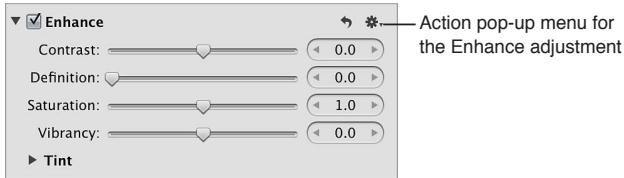
To brush an adjustment in

- 1 Select a photo.
- 2 If the adjustment you want to apply to the image is not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose the adjustment from the Add Adjustment pop-up menu.

Note: The Red Eye Correction, Spot & Patch, Straighten, Crop, Flip, White Balance, and Exposure adjustments cannot be brushed on images.

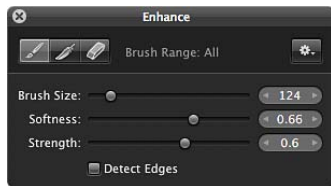
- 3 Specify parameter settings for the adjustment while viewing the effect on the image.

- 4 When the area of the image you want to adjust has the correct appearance, choose “Brush [adjustment] in” from the adjustment’s Action pop-up menu (with a gear icon).



The pointer turns into a brush, and the Brush HUD for the adjustment appears. The adjustment is also removed from the image.

- 5 In the Brush HUD, specify the following settings:
 - *To adjust the size of the brush:* Drag the Brush Size slider to the left to decrease the diameter of the brush, or drag the slider to the right to increase the diameter. You can also enter a value in the Brush Size value slider.
Tip: Use the scroll gesture to quickly resize the brush as you work.
 - *To adjust the softness of the brush:* Drag the Softness slider to the left to decrease the softness of the brush, or drag the slider to the right to increase the softness. You can also enter a value in the Softness value slider.
 - *To adjust the intensity of the brush:* Drag the Strength slider to the left to decrease the strength of the brush stroke, or drag the slider to the right to increase the strength. You can also enter a value in the Strength value slider.
 - *To specify that the adjustment detect edges in order to preserve detail:* Select the Detect Edges checkbox.



Note: For additional options, see [Working with Brush Strokes](#) on page 401.

- 6 Brush the adjustment over the areas of the image you want to apply it to.

Tip: It’s a good idea to regularly zoom in to the image to ensure the brush strokes cover the areas of the image you intended the adjustment to cover.

The adjustment is applied to the portion of the image it was brushed on.

For information about how you can modify the effect of the adjustment after it has been brushed on the image, see [Working with Brush Strokes](#) on page 401.

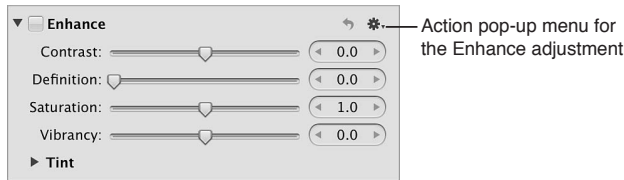
To brush an adjustment away

- 1 Select a photo.
- 2 If the adjustment you want to apply to the image is not shown in the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose the adjustment from the Add Adjustment pop-up menu.

Note: The Red Eye Correction, Spot & Patch, Straighten, Crop, Flip, White Balance, and Exposure adjustments cannot be brushed on images.

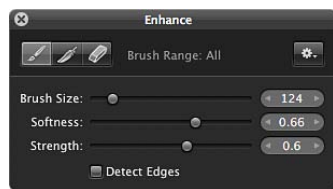
- 3 Specify parameter settings for the adjustment while viewing the effect on the image.

- 4 When the area of the image you want to adjust has the correct appearance, choose “Brush [adjustment] away” from the adjustment’s Action pop-up menu (with a gear icon).



The pointer turns into a brush, and the Brush HUD for the adjustment appears. The adjustment remains applied to the entire image.

- 5 In the Brush HUD, specify the following settings:
- *To adjust the size of the brush:* Drag the Brush Size slider to the left to decrease the diameter of the brush, or drag the slider to the right to increase the diameter. You can also enter a value in the Brush Size value slider.
 - *To adjust the softness of the brush:* Drag the Softness slider to the left to decrease the softness of the brush, or drag the slider to the right to increase the softness. You can also enter a value in the Softness value slider.
 - *To adjust the intensity of the brush:* Drag the Strength slider to the left to decrease the strength of the brush stroke, or drag the slider to the right to increase the strength. You can also enter a value in the Strength value slider.
 - *To specify that the adjustment detect edges in order to preserve detail:* Select the Detect Edges checkbox.



Note: For additional options, see [Working with Brush Strokes](#) on page 401.

- 6 Brush over the areas of the image you want to exclude the adjustment from.

Tip: It’s a good idea to regularly zoom in to the image to ensure that the brush strokes exclude the areas of the image you don’t want the adjustment to cover.

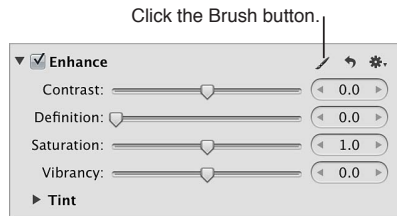
The adjustment is excluded from the portion of the image it was brushed on.

For information about how you can modify the effect of the adjustment after it has been brushed on the image, see [Working with Brush Strokes](#) on page 401.

To apply a brushed adjustment to the entire image

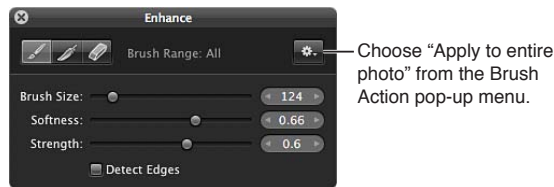
You can extend a brushed adjustment to the entire image if you decide that the adjustment should be applied to the entire image rather than just the area you brushed over.

- 1 Select the photo with the brushed adjustment you want applied to the entire image.
- 2 If necessary, select the brushed adjustment in the Adjustments inspector or the Adjustments pane of the Inspector HUD, then click the Brush button in the adjustment controls.



The Brush HUD for the adjustment appears.

- 3 In the Brush HUD, choose “Apply to entire photo” from the Brush Action pop-up menu.



The brushed adjustment’s brush strokes are removed, and the adjustment is applied to the entire image.

To modify a brushed adjustment after it has been applied to an image

- Specify new parameter settings using the controls for that adjustment in the Adjustments inspector or the Adjustments pane of the Inspector HUD.

Note: The parameter settings for the Retouch and Halo Reduction brushed adjustments cannot be modified after the adjustments have been applied.

Applying Quick Brush Adjustments

Aperture provides Quick Brush adjustments, such as Dodge, Burn, Halo Reduction, and Skin Smoothing, that have been specifically designed for brushing on images. Using Quick Brush adjustments, you brush the adjustment on the image and then modify the adjustment’s parameter settings.

To apply a Quick Brush adjustment

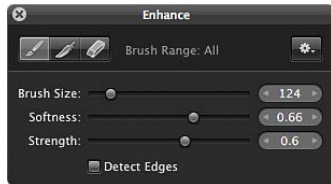
- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes from the Add Adjustment pop-up menu, then choose a Quick Brush adjustment from the submenu.
 - Choose a Quick Brush adjustment from the Quick Brush pop-up menu (with a brush icon) in the tool strip.
 - In Full Screen view, choose a Quick Brush adjustment from the Quick Brush pop-up menu in the toolbar.

The pointer turns into a brush, the Brush HUD for the adjustment appears, and adjustment controls for the adjustment appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

Note: The controls in the Retouch HUD are different from those that appear in the Brush HUD for other brushed adjustments. For more information about the controls in the Retouch HUD, see [Repairing Your Images](#) on page 301.

3 In the Brush HUD, specify the following settings:

- *To adjust the size of the brush:* Drag the Brush Size slider to the left to decrease the diameter of the brush, or drag the slider to the right to increase the diameter. You can also enter a value in the Brush Size value slider.
- *To adjust the softness of the brush:* Drag the Softness slider to the left to decrease the softness of the brush, or drag the slider to the right to increase the softness. You can also enter a value in the Softness value slider.
- *To adjust the intensity of the brush:* Drag the Strength slider to the left to decrease the strength of the brush stroke, or drag the slider to the right to increase the strength. You can also enter a value in the Strength value slider.
- *To specify that the adjustment detect edges in order to preserve detail:* Select the Detect Edges checkbox.



Note: For additional options, see [Working with Brush Strokes](#) on page 401.

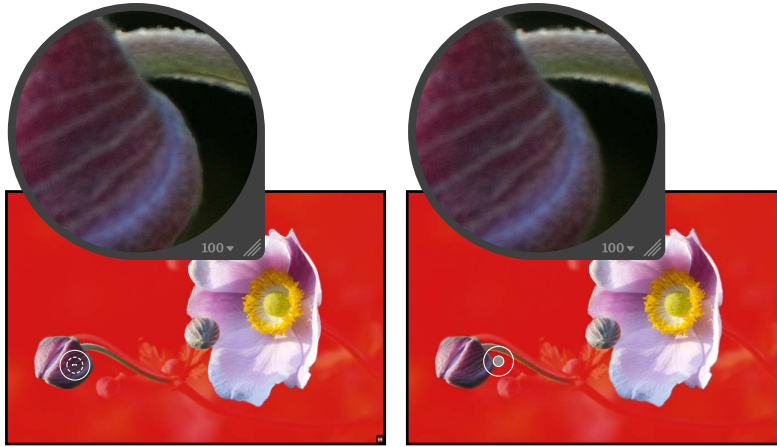
4 Brush the adjustment over the areas of the image you want to apply it to.

Working with Brush Strokes

There are many controls in the Brush HUD that you can use to apply, remove, and feather brush strokes.

To feather brush strokes

In many situations, it's best to avoid brush strokes that have hard, noticeable edges. The Brush HUD has a feathering brush that you can use to smooth the edges of previously applied brush strokes so that they blend seamlessly into the image. The feathering brush is applied to the selected brushed adjustment only.

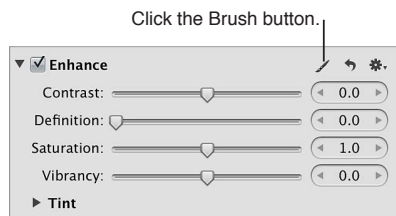


Before feathering

After feathering

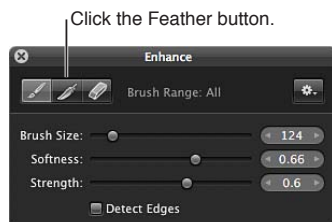
(used the feathering brush to smooth the edge of a previously applied brush stroke)

- 1 Select the photo with the brushed adjustment whose brush strokes you want to feather.
- 2 If necessary, select the brushed adjustment in the Adjustments inspector or the Adjustments pane of the Inspector HUD, then click the Brush button in the adjustment controls.



The Brush HUD for the adjustment appears.

- 3 In the Brush HUD, click the Feather button.



- 4 Specify the diameter of the brush and its intensity using the Brush Size and Strength sliders and value sliders.
- 5 Drag the brush over the edges of the previously applied brush strokes.

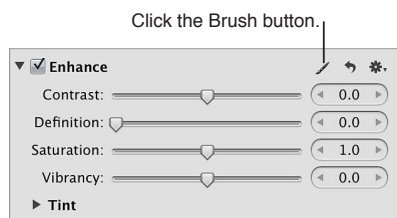
Tip: When feathering brush strokes, it's a good idea to display the brush strokes as color overlays to help identify the boundaries of each brush stroke. Then turn the color overlays off at regular intervals and visually inspect the image to ensure that the brush strokes are feathered appropriately. For more information about working with overlays, see [Working with Brushed Adjustment Overlays](#) on page 404.

The adjustment's brush strokes are feathered, blending them into the image.

To invert an adjustment's brush strokes

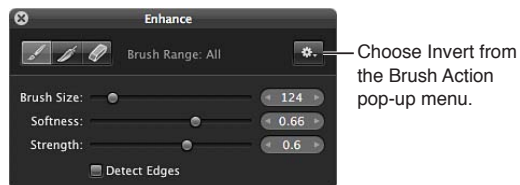
If you brush an adjustment over a specific area of an image and then decide that the adjustment should be removed from the area you just brushed over and applied to the rest of the image, you can invert the brush strokes.

- 1 Select the photo with the brushed adjustment whose brush strokes you want to invert.
- 2 If necessary, select the brushed adjustment in the Adjustments inspector or the Adjustments pane of the Inspector HUD, then click the Brush button in the adjustment controls.



The Brush HUD for the adjustment appears.

- 3 In the Brush HUD, choose Invert from the Brush Action pop-up menu.

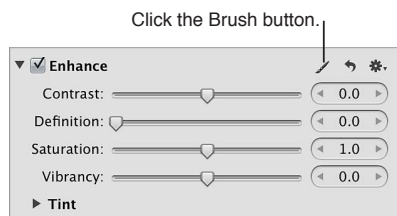


The adjustment's brush strokes in the image are inverted.

To modify an adjustment's brush strokes

You can modify the brush strokes of a previously applied adjustment by selecting the adjustment in the Adjustments inspector or the Adjustments pane of the Inspector HUD, clicking the Brush button, and then erasing or feathering the previously applied brush strokes as needed.

- 1 Select the photo whose brush strokes you want to change.
- 2 Click the Brush button at the top of the adjustment.



The Brush HUD for the adjustment appears.

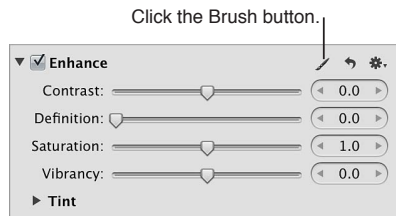
- 3 Use the controls in the Brush HUD to add new brush strokes, feather existing brush strokes, and erase portions of brush strokes on the image.

To erase brush strokes

You can erase the brush strokes for any brushed adjustment applied to an image using the Eraser button in the Brush HUD. The eraser brush erases the brush strokes of the selected brushed adjustment only. The eraser brush uses the same parameters as the standard brush (Brush Size, Softness, and Strength).

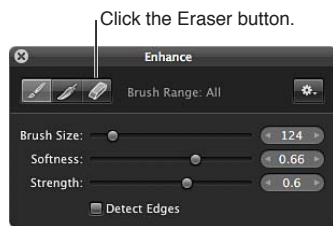
Tip: You can quickly switch from the brush to the eraser by holding down the Option key. Release the Option key to switch back to the brush.

- 1 Select the photo with the brushed adjustment whose brush strokes you want to erase.
- 2 If necessary, select the brushed adjustment in the Adjustments inspector or the Adjustments pane of the Inspector HUD, then click the Brush button in the adjustment controls.



The Brush HUD for the adjustment appears.

- 3 In the Brush HUD, click the Eraser button.



- 4 Specify the diameter of the brush, its softness, and its intensity using the Brush Size, Softness, and Strength sliders and value sliders.
- 5 Drag the brush over the parts of the previously applied brush strokes that you want to remove.

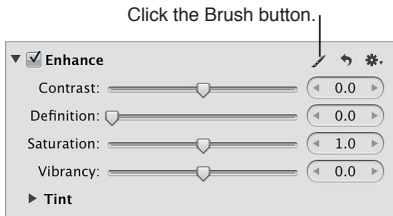
Tip: Some brushed adjustments are so subtle that it's difficult to identify the boundaries of the brush strokes or even the brush strokes themselves. In some cases, one brushed adjustment can obscure another when brushed over the same area. To help identify brush strokes, it's a good idea to use overlays. For more information, see [Working with Brushed Adjustment Overlays](#) on page 404.

The brush strokes selected with the eraser brush are erased.

To remove all brush strokes for a specific adjustment from an image

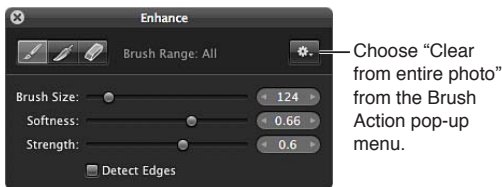
If you want to remove all brush strokes for a specific adjustment that are applied to an image, you can remove them all at once using the Brush Action pop-up menu in the Brush HUD for that adjustment.

- 1 Select the photo with the brushed adjustment whose brush strokes you want to remove.
- 2 If necessary, select the brushed adjustment in the Adjustments inspector or the Adjustments pane of the Inspector HUD, then click the Brush button in the adjustment controls.



The Brush HUD for the adjustment appears.

- 3 In the Brush HUD, choose “Clear from entire photo” from the Brush Action pop-up menu.



All brush strokes for the selected adjustment are removed from the image.

Working with Brushed Adjustment Overlays

Overlays are useful tools for identifying where brush strokes for the selected brushed adjustment have been applied to the image. When you’ve brushed an adjustment with a subtle softness and strength over the image, it can be difficult to discern the boundaries of the brush strokes. Aperture provides several types of overlays to help you visually identify the selected brushed adjustment’s cumulative brush strokes. When you accurately identify the boundaries of a brush stroke, you can use the eraser brush to remove any parts of the brush stroke that don’t belong, and you can use the feathering brush to smooth out the edges. For more information, see [Applying Brushed Adjustments](#) on page 396 and [Working with Brush Strokes](#) on page 401.

The Brush Action pop-up menu in the Brush HUD provides the following overlay options to help you with detailed brushing:

- *Color Overlay*: This option displays a pink overlay over the brush strokes for the selected adjustment.



- *Brush Strokes*: This option displays the brush strokes for the selected adjustment as pure white over a pure black background. This option provides the easiest method for identifying brush strokes that have been applied to an image. It's a good idea to use this overlay option if you suspect that you missed a tiny part of the image when brushing. The missed portions of the image appear as black dots or lines.



- *On Black*: This option displays a pure black mask over the image, with the brush strokes revealing the image beneath. This option is useful for showing detailed brush strokes over a bright area in the image.

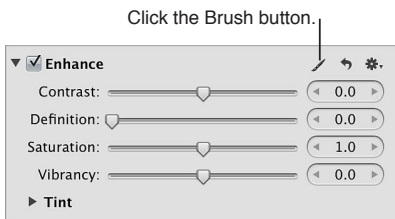


- *On White*: This option displays a pure white mask over the image, with brush strokes revealing the image beneath. This option is useful for detailed brush strokes over dark areas in the image.



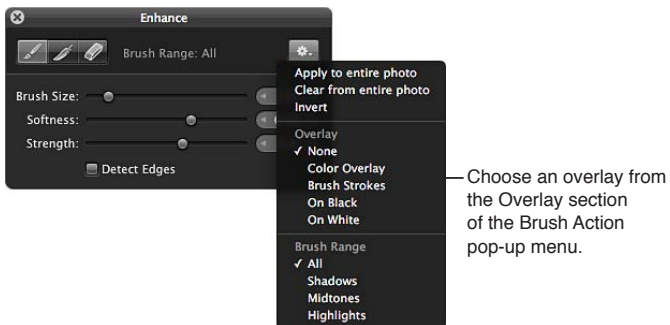
To apply an overlay for a brushed adjustment to an image

- 1 Select the photo with the brushed adjustment whose brush strokes you want to view as an overlay.
- 2 If necessary, select the brushed adjustment in the Adjustments inspector or the Adjustments pane of the Inspector HUD, then click the Brush button in the adjustment controls.



The Brush HUD for the adjustment appears.

- 3 In the Brush HUD, choose an overlay option from the Overlay section of the Brush Action pop-up menu.



The chosen overlay appears on the image, displaying the brush strokes for the selected brushed adjustment.

To turn an overlay off

- In the Brush HUD, choose None from the Overlay section of the Brush Action pop-up menu.

Limiting the Tonal Range of Brushed Adjustments

You can limit the adjustment you're about to brush on an image to a specific tonal range using the Brush Action pop-up menu in the Brush HUD. For example, if you want to brush an adjustment on an image and have the adjustment limited to the shadows, you choose Shadows from the Brush Action pop-up menu and then brush the adjustment on the image. If the brush touches a midtone or highlight, that part of the image is not changed.

Tip: This feature is particularly useful when burning and dodging, because you can limit the exposure adjustment to the tonal range you want to modify without having to worry about adversely affecting details in the tonal ranges that are appropriately exposed.

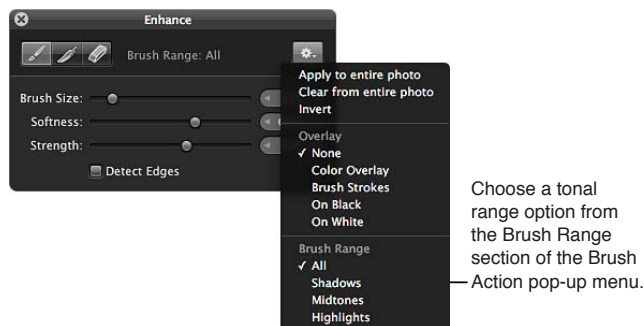
To limit a brushed adjustment to a specific tonal range

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose either "Brush [adjustment] in" or "Brush [adjustment] away" from the Action pop-up menu (with a gear icon) for the adjustment you want to apply to the image.
 - Choose a Quick Brush adjustment from the Quick Brush pop-up menu (with a brush icon) in the tool strip.
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes from the Add Adjustment pop-up menu, then choose a Quick Brush adjustment from the submenu.
 - In Full Screen view, choose a Quick Brush adjustment from the Quick Brush pop-up menu in the toolbar.

The Brush HUD for the adjustment appears.

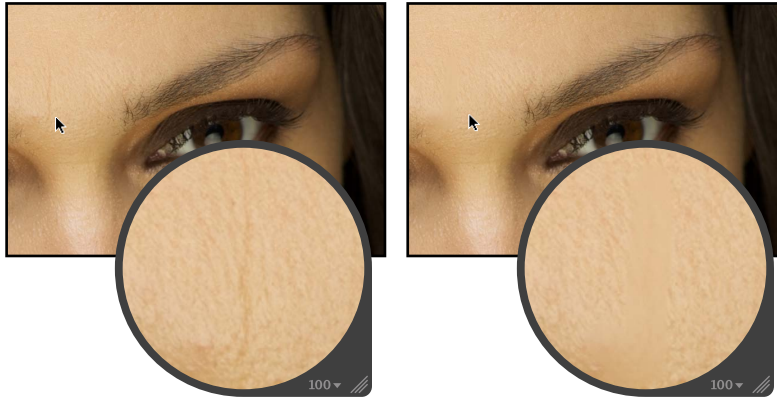
- 3 In the Brush HUD, choose a tonal range for the adjustment from the Brush Range section of the Brush Action pop-up menu.

Note: If you don't want the brushed adjustment limited to a specific tonal range, choose All.



Working with the Skin Smoothing Quick Brush Controls

You use the Skin Smoothing Quick Brush adjustment to smooth a person's skin by subtly blurring wrinkles and skin pores.



**Before Skin Smoothing
Quick Brush adjustment**

**After Skin Smoothing
Quick Brush adjustment**

To brush the Skin Smoothing adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Skin Smoothing from the Add Adjustment pop-up menu.
 - In the tool strip, choose Skin Smoothing from the Quick Brush pop-up menu (with a brush icon).

The Skin Smoothing Brush HUD appears, and the Skin Smoothing adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Skin Smoothing Brush HUD.

For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image that contains the person whose skin you want to smooth.

The person's skin in the image appears smoother where the Skin Smoothing Quick Brush adjustment is applied.

To modify the Skin Smoothing adjustment after it has been applied to an image

- 1 Select a photo with the Skin Smoothing adjustment applied to it.
- 2 In the Skin Smoothing area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Skin Smoothing adjustment by specifying the following settings:
 - Specify the area over which the Skin Smoothing adjustment is applied using the Radius slider and value slider.
 - Specify the amount of detail to preserve in the area of the image where the Skin Smoothing adjustment is applied using the Detail slider and value slider.

- Specify the amount of the Skin Smoothing adjustment you want to apply to the image using the Intensity slider and value slider.



The previously applied Skin Smoothing adjustment is modified.

Working with the Dodge Quick Brush Controls

You use the Dodge Quick Brush adjustment to lighten the area of the image the adjustment is brushed on. For example, if you have a subject in the foreground of the image that you want to emphasize by making it slightly lighter than the background, you use the Dodge Quick Brush adjustment.



Before Dodge adjustment



After Dodge adjustment
(lightened the hills in the foreground)

To brush the Dodge adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Dodge (Lighten) from the Add Adjustment pop-up menu.
 - In the tool strip, choose Dodge (Lighten) from the Quick Brush pop-up menu (with a brush icon).

The Dodge Brush HUD appears, and the Dodge adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Dodge Brush HUD.

For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

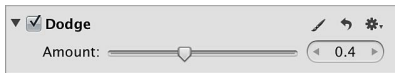
- 4 Brush the adjustment on the area of the image you want to lighten.

The image appears lighter where the Dodge Quick Brush adjustment is applied.

To modify the Dodge adjustment after it has been applied to an image

- 1 Select a photo with the Dodge adjustment applied to it.

- 2 In the Dodge area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Dodge adjustment by specifying the amount of the adjustment you want to apply to the image using the Amount slider and value slider.



The previously applied Dodge adjustment is modified.

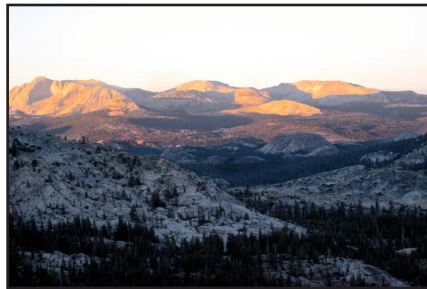
Working with the Burn Quick Brush Controls

You use the Burn Quick Brush adjustment to darken the area of the image the adjustment is brushed on. For example, if you want to obscure a visual element in the shadows of the image without using the Levels or Curves adjustment to crush the blacks (changing the tonality of all shadows in the image), you use the Burn Quick Brush adjustment.

For more information about Curves adjustments, see [An Overview of the Curves Adjustment](#) on page 350. For more information about Levels adjustments, see [An Overview of the Levels Adjustment](#) on page 367.



Before Burn adjustment



After Burn adjustment
(darkened the mountains in the background)

To brush the Burn adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Burn (Darken) from the Add Adjustment pop-up menu.
 - In the tool strip, choose Burn (Darken) from the Quick Brush pop-up menu (with a brush icon).

The Burn Brush HUD appears, and the Burn adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Burn Brush HUD.

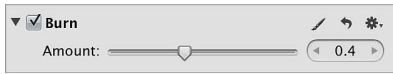
For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image you want to darken.

The image appears darker where the Burn Quick Brush adjustment is applied.

To modify the Burn adjustment after it has been applied to an image

- 1 Select a photo with the Burn adjustment applied to it.
- 2 In the Burn area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Burn adjustment by specifying the amount of the adjustment you want to apply to the image using the Amount slider and value slider.



The previously applied Burn adjustment is modified.

Working with the Polarize Quick Brush Controls

You use the Polarize Quick Brush adjustment to deepen colors in the image by specifically darkening the shadows and midtones without affecting the black and white points in the area of the image the adjustment is brushed on. The Polarize Quick Brush adjustment creates an effect similar to a polarizing filter by using a Multiply blend.



Before Polarize adjustment



After Polarize adjustment
(added contrast to the shadows and midtones of the granite rocks in the foreground)

To brush the Polarize adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Polarize (Multiply) from the Add Adjustment pop-up menu.
 - In the tool strip, choose Polarize (Multiply) from the Quick Brush pop-up menu (with a brush icon).

The Polarize Brush HUD appears, and the Polarize adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Polarize Brush HUD.

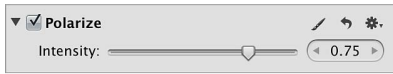
For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image that contains shadows and midtones you want to add contrast to.

Additional contrast appears in the shadows and midtones of the image in the areas where the Polarize Quick Brush adjustment is applied.

To modify the Polarize adjustment after it has been applied to an image

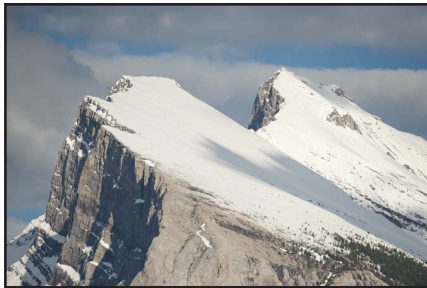
- 1 Select a photo with the Polarize adjustment applied to it.
- 2 In the Polarize area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Polarize adjustment by specifying the amount of the adjustment you want to apply to the image using the Intensity slider and value slider.



The previously applied Polarize adjustment is modified.

Working with the Intensify Contrast Quick Brush Controls

You use the Intensify Contrast Quick Brush adjustment to correct shadow areas of the image that appear washed out by intensifying the contrast between pure black and 50 percent gray in the area of the image the adjustment is brushed on. The Intensify Contrast Quick Brush adjustment is equivalent to applying an Overlay blend.



Before Intensify Contrast adjustment



After Intensify Contrast adjustment

(added contrast to the exposed mountainside and trees in the foreground)

To brush the Intensify Contrast adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Intensify Contrast (Overlay) from the Add Adjustment pop-up menu.
 - In the tool strip, choose Intensify Contrast (Overlay) from the Quick Brush pop-up menu (with a brush icon).

The Intensify Contrast Brush HUD appears, and the Intensify Contrast adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Intensify Contrast Brush HUD.

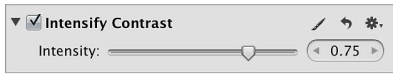
For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image where you want to intensify contrast in shadows.

Additional contrast appears between pure black and 50 percent gray in the area of the image where the Intensify Contrast Quick Brush adjustment is applied.

To modify the Intensify Contrast adjustment after it has been applied to an image

- 1 Select a photo with the Intensify Contrast adjustment applied to it.
- 2 In the Intensify Contrast area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Intensify Contrast adjustment by specifying the amount of the adjustment you want to apply to the image using the Intensity slider and value slider.



The previously applied Intensify Contrast adjustment is modified.

Working with the Tint Quick Brush Controls

You use the Tint Quick Brush adjustment to shift the tint in the area of the image the adjustment is brushed on. For example, if an object in your image has a cyan tint that you want to neutralize without changing the overall tint of the image, you use the Tint Quick Brush adjustment and then add magenta to the brush stroke using the Angle slider and value slider.



Before Tint adjustment



After Tint adjustment
(changed the color of three flower petals)

Note: You can also apply a Tint adjustment by brushing the entire Enhance adjustment's parameter settings in to or out of an image. However, brushing the Enhance adjustment on an image applies the Contrast, Definition, Saturation, Vibrancy, and Tint parameter settings. You use the Quick Brush equivalents when you need to apply each of these adjustments in different ways to different parts of the photo. For more information about the Enhance adjustment, see [An Overview of the Enhance Adjustment](#) on page 340.

To brush the Tint adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Tint from the Add Adjustment pop-up menu.
 - In the tool strip, choose Tint from the Quick Brush pop-up menu (with a brush icon).

The Tint Brush HUD appears, and the Tint adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Tint Brush HUD.

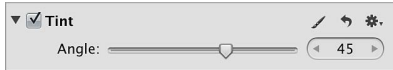
For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image where you want to change the tint.

The tint is shifted in the area of the image where the Tint Quick Brush adjustment is applied.

To modify the Tint adjustment after it has been applied to an image

- 1 Select a photo with the Tint adjustment applied to it.
- 2 In the Tint area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Tint adjustment by specifying which way you want to shift the color's tint using the Angle slider and value slider.



The previously applied Tint adjustment is modified.

Working with the Contrast Quick Brush Controls

You use the Contrast Quick Brush adjustment to modify the contrast in the area of the image the adjustment is brushed on.



Before Contrast adjustment



After Contrast adjustment
(added contrast to elk and grass)

Note: You can also apply a Contrast adjustment by brushing the entire Enhance adjustment's parameter settings in to or out of an image. However, brushing the Enhance adjustment on an image applies the Contrast, Definition, Saturation, Vibrancy, and Tint parameter settings. You use the Quick Brush equivalents when you need to apply each of these adjustments in different ways to different parts of the photo. For more information about the Enhance adjustment, see [An Overview of the Enhance Adjustment](#) on page 340.

To brush the Contrast adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Contrast from the Add Adjustment pop-up menu.
 - In the tool strip, choose Contrast from the Quick Brush pop-up menu (with a brush icon).

The Contrast Brush HUD appears, and the Contrast adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Contrast Brush HUD.

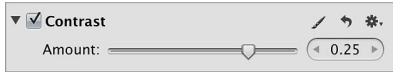
For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image where you want to change the contrast.

The contrast is changed in the area of the image where the Contrast Quick Brush adjustment is applied.

To modify the Contrast adjustment after it has been applied to an image

- 1 Select a photo with the Contrast adjustment applied to it.
- 2 In the Contrast area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Contrast adjustment by specifying the amount of the adjustment you want to apply to the image using the Amount slider and value slider.



The previously applied Contrast adjustment is modified.

Working with the Saturation Quick Brush Controls

You use the Saturation Quick Brush adjustment to modify the saturation of the colors in the area of the image the adjustment is brushed on.



Before Saturation adjustment



After Saturation adjustment

(added saturation to the green trees in the background)

Note: You can also apply a Saturation adjustment by brushing the entire Enhance adjustment's parameter settings in to or out of an image. However, brushing the Enhance adjustment on an image applies the Contrast, Definition, Saturation, Vibrancy, and Tint parameter settings. You use the Quick Brush equivalents when you need to apply each of these adjustments in different ways to different parts of the photo. For more information about the Enhance adjustment, see [An Overview of the Enhance Adjustment](#) on page 340.

To brush the Saturation adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Saturation from the Add Adjustment pop-up menu.
 - In the tool strip, choose Saturation from the Quick Brush pop-up menu (with a brush icon).

The Saturation Brush HUD appears, and the Saturation adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Saturation Brush HUD.

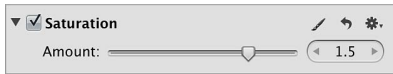
For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image where you want to change the saturation.

The saturation is changed in the area of the image where the Saturation Quick Brush adjustment is applied.

To modify the Saturation adjustment after it has been applied to an image

- 1 Select a photo with the Saturation adjustment applied to it.
- 2 In the Saturation area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Saturation adjustment by specifying the amount of the adjustment you want to apply to the image using the Amount slider and value slider.



The previously applied Saturation adjustment is modified.

Working with the Definition Quick Brush Controls

You use the Definition Quick Brush adjustment to add clarity and reduce haze without adding too much contrast to the area of the image the adjustment is brushed on.



Before Definition adjustment



After Definition adjustment

(added definition to the flower in the foreground)

Note: You can also apply a Definition adjustment by brushing the entire Enhance adjustment's parameter settings in to or out of an image. However, brushing the Enhance adjustment on an image applies the Contrast, Definition, Saturation, Vibrancy, and Tint parameter settings. You use the Quick Brush equivalents when you need to apply each of these adjustments in different ways to different parts of the photo. For more information about the Enhance adjustment, see [An Overview of the Enhance Adjustment](#) on page 340.

To brush the Definition adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Definition from the Add Adjustment pop-up menu.
 - In the tool strip, choose Definition from the Quick Brush pop-up menu (with a brush icon).

The Definition Brush HUD appears, and the Definition adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Definition Brush HUD.

For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image where you want to add definition.

Clarity is added and haze is reduced in the area of the image where the Definition Quick Brush adjustment is applied.

To modify the Definition adjustment after it has been applied to an image

- 1 Select a photo with the Definition adjustment applied to it.
- 2 In the Definition area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Definition adjustment by specifying the following settings:
 - Specify the area over which the Definition adjustment is applied using the Radius slider and value slider.
 - Specify the amount of the Definition adjustment you want to apply to the image using the Intensity slider and value slider.



The previously applied Definition adjustment is modified.

Working with the Vibrancy Quick Brush Controls

You use the Vibrancy Quick Brush adjustment to add saturation to desaturated colors only in the area of the image the adjustment is brushed on. Skin tones are not affected.



Before Vibrancy adjustment



After Vibrancy adjustment
(added saturation to desaturated colors
in the green wave)

Note: You can also apply a Vibrancy adjustment by brushing the entire Enhance adjustment's parameter settings in to or out of an image. However, brushing the Enhance adjustment on an image applies the Contrast, Definition, Saturation, Vibrancy, and Tint parameter settings. You use the Quick Brush equivalents when you need to apply each of these adjustments in different ways to different parts of the photo. For more information about the Enhance adjustment, see [An Overview of the Enhance Adjustment](#) on page 340.

To brush the Vibrancy adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Vibrancy from the Add Adjustment pop-up menu.
 - In the tool strip, choose Vibrancy from the Quick Brush pop-up menu (with a brush icon).

The Vibrancy Brush HUD appears, and the Vibrancy adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Vibrancy Brush HUD.

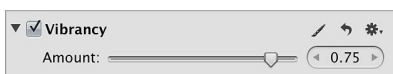
For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image where you want to add saturation to desaturated colors only.

The saturation of the desaturated colors is changed in the area of the image where the Vibrancy Quick Brush adjustment is applied.

To modify the Vibrancy adjustment after it has been applied to an image

- 1 Select a photo with the Vibrancy adjustment applied to it.
- 2 In the Vibrancy area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Vibrancy adjustment by specifying the amount of the adjustment you want to apply to the image using the Amount slider and value slider.



The previously applied Vibrancy adjustment is modified.

Working with the Blur Quick Brush Controls

You use the Blur Quick Brush adjustment to soften the area of the image the adjustment is brushed on.



Before Blur adjustment



After Blur adjustment
(blurred the background)

To brush the Blur adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Blur from the Add Adjustment pop-up menu.
 - In the tool strip, choose Blur from the Quick Brush pop-up menu (with a brush icon).

The Blur Brush HUD appears, and the Blur adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Blur Brush HUD.

For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image where you want to soften or obscure detail.

The visual details are softened in the area of the image where the Blur Quick Brush adjustment is applied.

To modify the Blur adjustment after it has been applied to an image

- 1 Select a photo with the Blur adjustment applied to it.
- 2 In the Blur area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Blur adjustment by specifying the amount of the adjustment you want to apply to the image using the Amount slider and value slider.



The previously applied Blur adjustment is modified.

Working with the Sharpen Quick Brush Controls

You use the Sharpen Quick Brush adjustment to fine-tune the details in the area of the image the adjustment is brushed on.



Before Sharpen adjustment

After Sharpen adjustment

To brush the Sharpen adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Sharpen from the Add Adjustment pop-up menu.
 - In the tool strip, choose Sharpen from the Quick Brush pop-up menu (with a brush icon).

The Sharpen Brush HUD appears, and the Sharpen adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Sharpen Brush HUD.

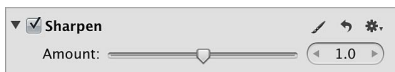
For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image that you want to sharpen.

The visual details are sharpened in the area of the image where the Sharpen Quick Brush adjustment is applied.

To modify the Sharpen adjustment after it has been applied to an image

- 1 Select a photo with the Sharpen adjustment applied to it.
- 2 In the Sharpen area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Sharpen adjustment by specifying the amount of the adjustment you want to apply to the image using the Amount slider and value slider.



The previously applied Sharpen adjustment is modified.

Working with the Halo Reduction Quick Brush Controls

You use the Halo Reduction Quick Brush adjustment to remove the blue and purple fringes that are occasionally produced with certain lenses when the image is overexposed.

To brush the Halo Reduction adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Halo Reduction from the Add Adjustment pop-up menu.
 - In the tool strip, choose Halo Reduction from the Quick Brush pop-up menu (with a brush icon).

The Halo Reduction Brush HUD appears, and the Halo Reduction adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Halo Reduction Brush HUD.

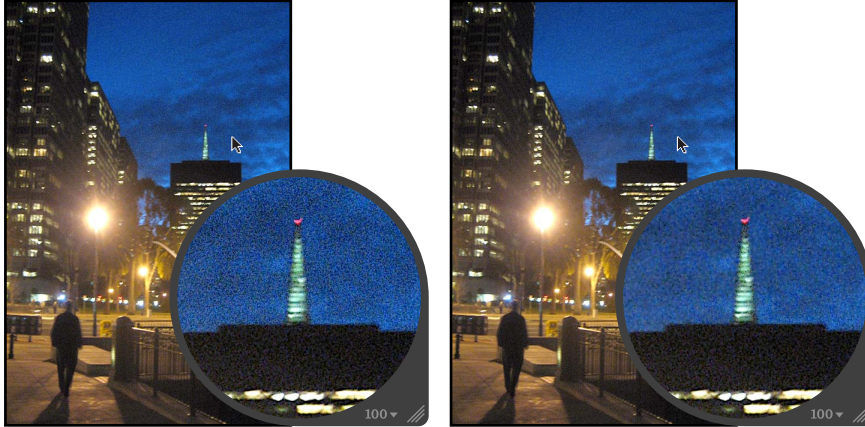
For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image where you want to remove the halo effect.

The halo effect is removed in the area of the image where the Halo Reduction Quick Brush adjustment is applied.

Working with the Noise Reduction Quick Brush Controls

You use the Noise Reduction Quick Brush adjustment to remove digital noise in the area of the image the adjustment is brushed on.



Before Noise Reduction adjustment

After Noise Reduction adjustment

To brush the Noise Reduction adjustment on an image

- 1 Select a photo.
- 2 Do one of the following:
 - In the Adjustments inspector or the Adjustments pane of the Inspector HUD, choose Quick Brushes > Noise Reduction from the Add Adjustment pop-up menu.
 - In the tool strip, choose Noise Reduction from the Quick Brush pop-up menu (with a brush icon).

The Noise Reduction Brush HUD appears, and the Noise Reduction adjustment controls appear in the Adjustments inspector and the Adjustments pane of the Inspector HUD, if both are shown.

- 3 Specify the brush stroke settings using the controls in the Noise Reduction Brush HUD.

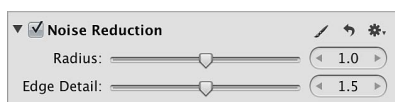
For more information about the controls in the Brush HUD, see [Working with Controls in the Brush HUD](#) on page 395. For more information about applying brush strokes to an image, see [Working with Brush Strokes](#) on page 401.

- 4 Brush the adjustment on the area of the image where you want to reduce the digital noise.

The digital noise is removed from the area of the image where the Noise Reduction Quick Brush adjustment is applied.

To modify the Noise Reduction adjustment after it has been applied to an image

- 1 Select a photo with the Noise Reduction adjustment applied to it.
- 2 In the Noise Reduction area of the Adjustments inspector or the Adjustments pane of the Inspector HUD, modify the Noise Reduction adjustment by specifying the following settings:
 - Specify the area over which the Noise Reduction adjustment is applied using the Radius slider and value slider.
 - Specify the amount of edge detail you want to preserve in areas of high contrast using the Edge Detail slider and value slider.



The previously applied Noise Reduction adjustment is modified.

An Overview of Printing

Aperture makes it easy to print high-resolution photos. You can print single photos, contact sheets, webpages, and books. You can print photos selected in the Light Table, as well as create PDF files that you can easily transfer to clients for review.

Aperture allows you to print your photos as high-resolution images and multi-image contact sheets. Aperture also offers a variety of printing options, including using a standard, roll, or custom paper size and assigning a specific ColorSync profile.

The easiest way to print photos is to use one of the Aperture print presets. Print presets, or groups of print settings, allow you to print your photos without having to repeatedly change your settings or remember settings used in specific situations. If the preconfigured presets don't meet your needs, you can create your own.

For example, if you regularly print both 8-by-10-inch and 11-by-14-inch photographs, you can create a print preset for each of those paper sizes. For photographers with multiple printers, such as a standard and wide-format inkjet printer, you can create print presets for each printer. Give each preset a name you'll remember, and the next time you need to print, simply select the print preset that corresponds to your paper size or printer type.

You can create new print presets, modify existing print presets, and delete print presets you no longer use. When changing your print presets, remember that modifying an existing preset changes its original settings; creating a new preset, on the other hand, allows you to preserve the settings in the existing preset. For more information about working with print presets, see [Creating and Modifying Print Presets](#) on page 434.

Before you print your photos, you can soft proof them onscreen using the onscreen proofing feature. Profiles used for onscreen proofing are also applied to the photo when printed. For more information about onscreen proofing, see [Setting Up the Viewer for Onscreen Proofing](#) on page 117.

Here are a few suggestions to help you with the printing process:

- *Use the highest-resolution image possible:* It's preferable to work with photos imported directly from your digital camera. However, even photos imported directly from your camera or card reader can be low-resolution, low-quality images. This is why it's important to shoot with the highest-resolution settings available on your camera. Compression settings applied during image capture may be apparent when you print. Consider shooting RAW files if the setting is available, and shoot at the highest bit depth possible.

If you've imported a photo that was reduced or compressed in another application, Aperture cannot increase the resolution of the file. In other words, Aperture cannot replace image information that was previously removed during the compression process. If possible, locate the original full-resolution image file, use the Lift and Stamp tools to apply the adjustments you've made to the low-resolution file, and print the higher-resolution image file.

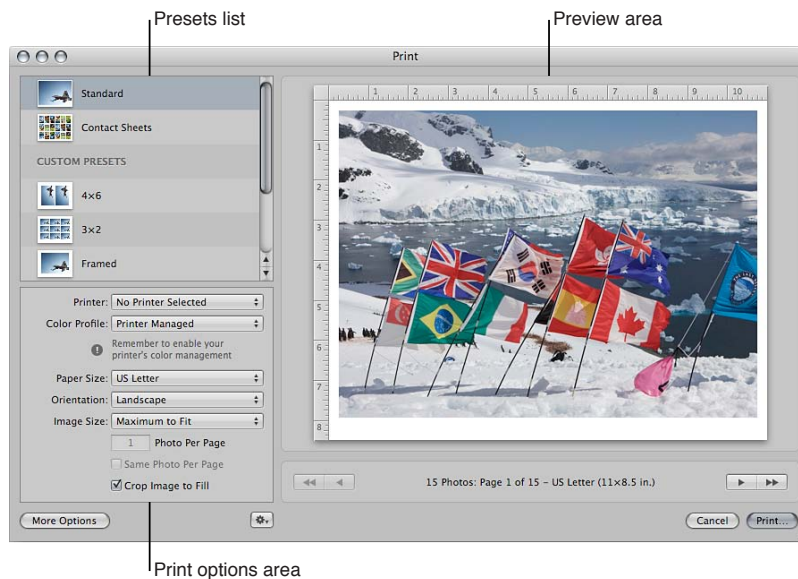
- *Use a printer that supports 16-bit printing:* If the photo you're printing is a high-resolution 16-bit file, using a printer that supports 16-bit printing results in smoother gradations.
- *Color calibrate your Aperture system:* It's important to calibrate your display and printer so that your printed photos look as much as possible like the photos you see on the computer screen.

Working with the Print Controls

Whether you're printing a high-resolution print or a single image multiple times on the same page, you use the Standard print controls in the Print dialog to print your work. If you want to print multiple image contact sheets, you use the Contact Sheets controls in the Print dialog. For each option, you can reveal additional controls such as layout, margin, image border, metadata, and image adjustment settings, and additional options such as page numbers and crop marks. These additional controls are often only set once, but you can access them at any time.

To open the Print dialog

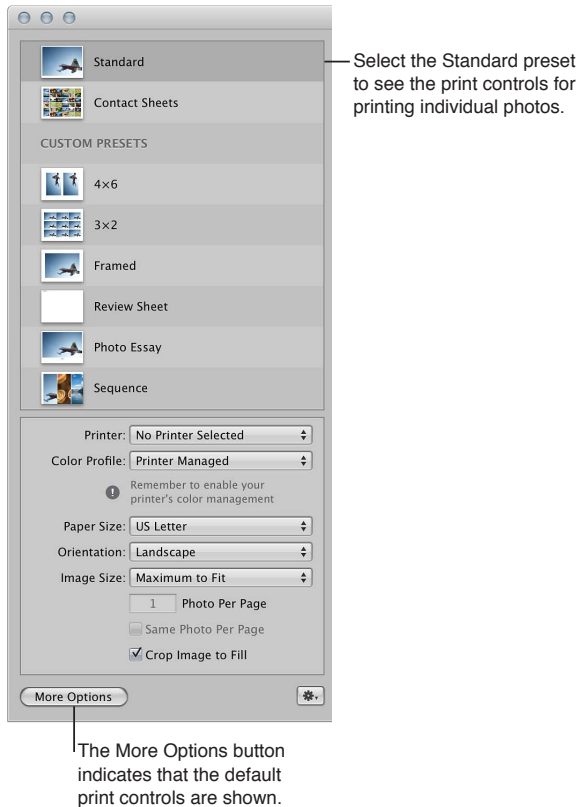
- Select a photo or series of photos in the Browser, then choose File > Print Images (or press Command-P).



To access the print controls for standard print presets

There are a default set of printer and layout controls for standard print presets. You can also access additional print options, such as additional layout, margin, render, image adjustment, image border, and metadata controls. For example, you can use these controls to include your studio's name and logo on each print and then save the settings as a preset. The next time you print images, select the print preset you just saved and print your image selection using the default print controls for standard prints.

- 1 Select either the Standard print preset or a custom preset in the Presets list of the Print dialog.



The basic controls for standard print presets are shown.

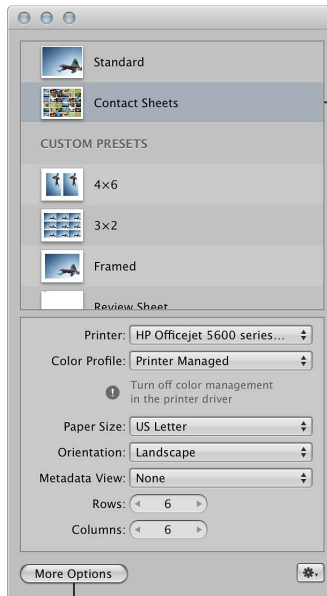
- 2 To show additional print controls, click the More Options button.

The Print dialog expands to show additional print controls for standard prints. After adjusting the additional print settings, click the Fewer Options button at the bottom-left corner of the Print dialog to return to the default print controls.

To access the print controls for contact sheet presets

There is a default set of printer and layout controls for contact sheet presets. You can also access additional print options, such as additional layout, margin, image border, metadata, and image adjustment controls. For example, you can use these controls to include your studio's name and logo on each print along with a limited amount of metadata printed below each image and then save the settings as a contact sheet preset. The next time you want to print a contact sheet, select the contact sheet preset you just saved, and print a contact sheet of your image selections using the default print controls for contact sheets.

- 1 Select either the Contact Sheets preset or a contact sheet preset saved in the Custom Presets area of the Print dialog.



Select the Contact Sheets preset to see the print controls for printing contact sheets.

The More Options button indicates that the default print controls are shown.

The Printer and Layout controls for contact sheet presets are shown.

- 2 To show additional print controls, click the More Options button.

The Print dialog expands to show additional print controls for contact sheets. After adjusting the additional print settings, click the Fewer Options button at the bottom-left corner of the Print dialog to return to the default print controls.

Printing Photos and Contact Sheets in Aperture

Printing a Single Photo

When you want to print a single, high-resolution photo on a single sheet of paper, you use the Standard preset or one of the presets in the Custom Presets area of the Print dialog.

Use the Copies field in the OS X Print dialog to print multiple copies of your high-resolution photo.

To print a single photo

- 1 In the Browser, select a photo.
- 2 Choose File > Print Image (or press Command-P).
- 3 In the Print dialog, select either the Standard preset or a preset in the Custom Presets area.
- 4 In the default print options area, specify the following settings:
 - Choose a printer from the Printer pop-up menu.
 - If necessary, choose a print profile from the Color Profile pop-up menu.

Note: Printer Managed, the default setting, is the appropriate choice in most cases. If you are outputting to a specific device profile or if you have color calibrated your printer, you should choose an appropriate profile from this pop-up menu.

- Choose a paper size from the available items in the Paper Size pop-up menu.
 - In the Orientation pop-up menu, choose whether you want the image printed in Landscape mode or Portrait mode.
 - Choose the size of the printed photo from the Image Size pop-up menu, by doing one of the following:
 - *To print the photo so that the entire image fits on the page:* Choose Maximum to Fit. If you've chosen a borderless printing option, Aperture fits the entire photo on the page; margins appear on two sides of the photo where the dimensions don't match.
 - *To print the photo so that it fills in the entire page:* Choose Maximum to Fit, and select the Crop Image to Fill checkbox below the Image Size pop-up menu. If you've chosen a borderless printing option, the photo covers the entire page; parts of the photo are cropped if the dimensions don't match.
 - *To print the photo at a standard size:* Choose a standard dimension, such as 5 x 7, from the pop-up menu.
 - *To print the photo in a custom size:* Choose Custom from the pop-up menu, then enter the dimensions in the Height and Width fields that appear below.
- 5 After you've verified that the settings in the Print dialog are correct, click Print.

The OS X Print dialog appears.

- 6 Confirm that the settings in the OS X Print dialog are correct.

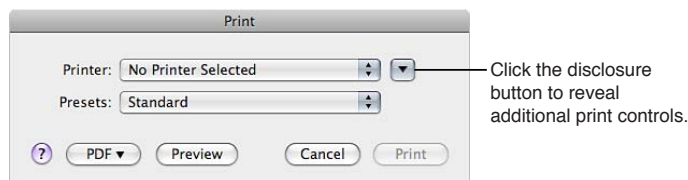
Important: Make sure the paper type matches the color profile selected in the Aperture Print dialog. If you chose Printer Managed, make sure to enable your printer's color management. For more information about enabling color management on your printer, see the documentation that came with your printer.

- 7 Click Print.

The high-resolution photo is printed on a single sheet of paper.

To print multiple copies of a photo

- 1 Follow steps 1 through 5 in the previous task.
- 2 In the OS X Print dialog, click the disclosure button to reveal additional print controls.



- 3 In the Copies field, enter the number of copies to print, then click Print.

Printing Multiple Copies of a Photo on a Page

You can print the same photo multiple times on the same sheet of paper. This option is useful for saving paper when the image size is small.

To print the same photo multiple times on a single sheet of paper

- 1 In the Browser, select the photo you want to print.
- 2 Choose File > Print Image (or press Command-P).
- 3 In the Print dialog, select either the Standard preset or a preset in Custom Presets.
- 4 In the default print options area, specify the following settings:
 - Choose a printer from the Printer pop-up menu.
 - If necessary, choose a print profile from the Color Profile pop-up menu.

Note: Printer Managed, the default setting, is the appropriate choice in most cases. If you are outputting to a specific device profile or if you have color calibrated your printer, you should choose an appropriate profile from this pop-up menu.
 - Choose a paper size from the available items in the Paper Size pop-up menu.
 - In the Orientation pop-up menu, choose whether you want the photo printed in Landscape mode or Portrait mode.
 - Choose a standardized size, such as 2 x 3, for the printed photo from the Image Size pop-up menu. Pick a size that's small enough to fit multiple photos on the paper size chosen in the Paper Size pop-up menu.

The Photo Per Page and Same Photo Per Page controls below the Image Size pop-up menu become available.
 - Enter the number of times you want the photo printed on the page in the Photos Per Page field, then select the Same Photo Per Page checkbox.

The Preview area updates to show multiple photos on the page.
- 5 If you want each photo to fill its allotted printable space, select the Crop Image to Fill checkbox.
- 6 If you want to modify the arrangement of the photos on the page, click the More Options button at the bottom of the Print dialog, then use the Layout and Margins controls to adjust the image spacing and page margins.
- 7 After you've verified that the settings in the Print dialog are correct, click Print.

The OS X Print dialog appears.
- 8 Confirm that the settings in the OS X Print dialog are correct.

Important: Make sure the paper type matches the color profile selected in the Aperture Print dialog. If you chose Printer Managed, make sure to enable your printer's color management. For more information about enabling color management on your printer, see the documentation that came with your printer.
- 9 Click Print.

Printing a Series of Photos

You can print multiple photos at once, each on its own sheet of paper.

To print a series of photos

- 1 In the Browser, select the photos you want to print.
- 2 Choose File > Print Images (or press Command-P).
- 3 In the Print dialog, select either the Standard preset or a preset in Custom Presets.
- 4 Confirm that the settings in the Print dialog are correct.
For more information about print settings, see [Printing a Single Photo](#) on page 426.
- 5 If necessary, use the navigation buttons in the Preview area to verify that the photos in the job you are about to print are correct.
- 6 Click Print.
The OS X Print dialog appears.
- 7 Confirm that the settings in the OS X Print dialog are correct.

Important: Make sure the paper type matches the color profile selected in the Aperture Print dialog. If you chose Printer Managed, make sure to enable your printer's color management. For more information about enabling color management on your printer, see the documentation that came with your printer.

- 8 Click Print.

Your photos are printed, one photo per page.

Printing a Contact Sheet or Series of Contact Sheets

You can print contact sheets of your photos, and Aperture does all the layout work for you. All you have to do is specify the number of pages or columns; Aperture adjusts the size of the photos based on your layout and margin settings.

To print contact sheets

- 1 In the Browser, select the photos you want to print.
- 2 Choose File > Print Images (or press Command-P).
- 3 In the Print dialog, select either the Contact Sheets preset or the Review Sheet preset in the Custom Presets section.
- 4 In the default print options area, specify the following settings:
 - Choose a printer from the Printer pop-up menu.
 - If necessary, choose a color profile from the Color Profile pop-up menu.
Note: Printer Managed, the default setting, is the appropriate choice in most cases. If you are outputting to a specific device profile or if you have color calibrated your printer, you should choose an appropriate profile from this pop-up menu.
 - Choose a paper size from the available items in the Paper Size pop-up menu.
 - In the Orientation pop-up menu, choose whether you want the contact sheet printed in Landscape mode or Portrait mode.
 - Choose a metadata view to display underneath each photo on the contact sheet.
 - Specify the number of rows and columns to set how many photos are printed on the page.
The Preview area updates to show the new print dimensions for each photo in the contact sheet. You can double-click a photo to adjust its scale within the image frame. You use the Image Scale HUD to zoom in to and out of the photo.

- 5 If you want to modify the arrangement of the photos on the page, click the More Options button at the bottom of the Print dialog, then use the Layout and Margins controls to adjust image spacing between the photos and add margins.
- 6 If you want to manually adjust the spacing margins, drag the row and column lines in the Preview area.
- 7 After you've verified that the settings in the Print dialog are correct, click Print.

The OS X Print dialog appears.

- 8 Confirm that the settings in the OS X Print dialog are correct.

Important: Make sure the paper type matches the color profile selected in the Aperture Print dialog. If you chose Printer Managed, make sure to enable your printer's color management. For more information about enabling color management on your printer, see the documentation that came with your printer.

- 9 Click Print.

Your contact sheet is printed.

Manually Adjusting Photo Layout in the Preview Area

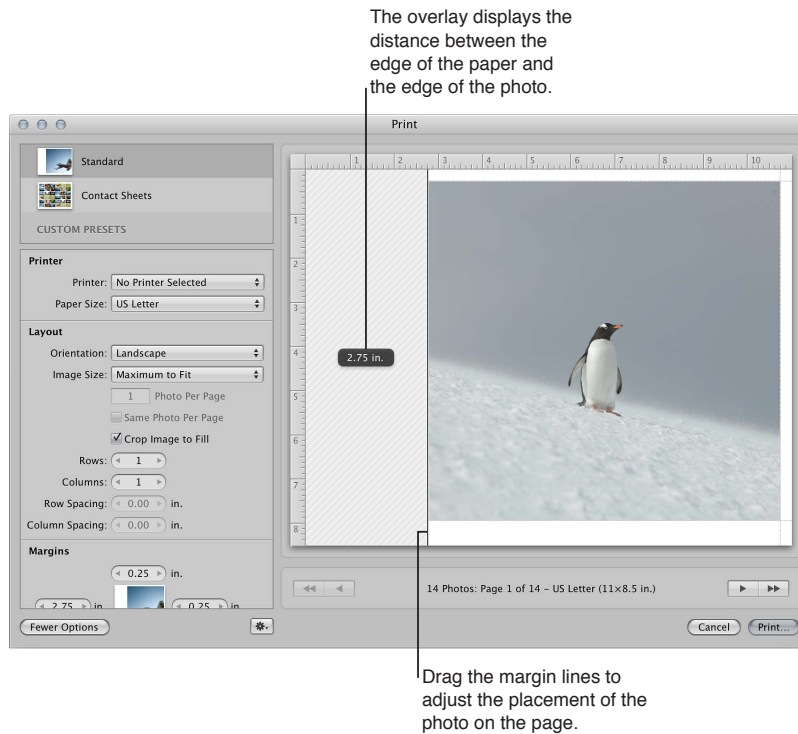
In addition to using the Layout and Margins controls in the Print dialog, you can manually adjust the margins and spacing in the Preview area of the Print dialog. When printing a single photo with a border or dimensions smaller than the paper size, you can adjust the placement of the photo on the page by dragging the margin lines in the Preview area. Similarly, when you are printing multiple photos on the same sheet of paper, you can adjust both the margins surrounding the photos and the spacing between the photos. If you selected the Crop Marks checkbox in the Metadata & Page Options section of the Print dialog, you can also adjust the crop lines to modify the margins and spacing of the photos on the page.

Note: The margin lines are not visible unless you place the pointer over the Preview area of the Print dialog.

To manually adjust the placement of a single photo on a page

- 1 In the Browser, select the photo you want to print.
- 2 Choose File > Print Images (or press Command-P).
- 3 In the Print dialog, choose a single photo print preset and a photo size that is smaller than the chosen paper size.

- 4 In the Preview area, drag the margin lines to adjust the placement of the photo on the page.

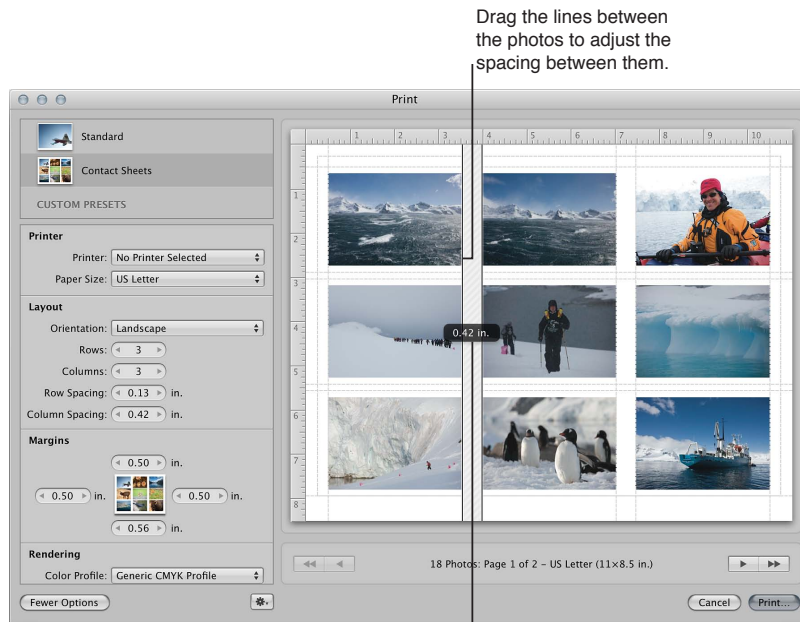


The distance between the edge of the paper and the edge of the photo is displayed in an overlay as you drag the margin line.

To manually adjust the placement of multiple photos on a page

- 1 In the Browser, select the photo or photos you want to print.
- 2 Choose File > Print Images (or press Command-P).
- 3 In the Print dialog, do one of the following:
 - Select a print preset that prints the same photo multiple times on the same sheet of paper.
 - Select a print preset for a contact sheet.

- 4 In the Preview area, do either or both of the following:
- Drag the margin lines between the outer edges of the photos and the paper's edge.
 - Drag the lines between the photos to adjust the spacing between them.



Dragging one vertical line adjusts the vertical spacing between all photos on the page equally; similarly, dragging one horizontal line adjusts the horizontal spacing between the photos in equal amounts.

Printing a Book

You can print a book to check its final format and appearance before handing it off to a professional printer, ordering a printed copy online, or distributing copies to others. You can also create a PDF file of a book to store an electronic copy for use at another time or to send to others.

For more information about creating and working with books, see [An Overview of Creating Books](#) on page 516.

To print a book

- 1 Select a book album in the Library inspector.
The book appears in the Book Layout Editor.
- 2 Choose File > Print Book (or press Command-P).
The OS X Print dialog appears.
- 3 Verify that the settings in the OS X Print dialog are correct, then click Print.
Your book is printed.

To create a PDF file of a book

- 1 In the Library inspector, select a book album.
- 2 Choose File > Print Book (or press Command-P).
- 3 In the Print dialog, choose Save as PDF from the PDF pop-up menu.

The Save dialog appears.

- 4 Enter a name for the PDF file and choose a location to save the file, then click Save.

Printing a Light Table Arrangement

You can print an arrangement of images in the Light Table. You can also create a PDF of your Light Table arrangement using the OS X Print dialog.

To print a Light Table arrangement

- 1 Select a Light Table album in the Library inspector.

The Light Table appears above the Browser.

- 2 Do one of the following:

- *To print selected photos:* Select the photos you want to print in the Light Table.
- *To print the entire Light Table arrangement:* Deselect all photos in the Light Table by clicking the background.

- 3 Choose File > Print Light Table (or press Command-P).

The OS X Print dialog appears.

- 4 Verify that the settings in the OS X Print dialog are correct, then click Print.

Your Light Table arrangement is printed.

To create a PDF file of a Light Table arrangement

- 1 Select a Light Table album in the Library inspector.

The Light Table appears above the Browser.

- 2 Do one of the following:

- *To print selected photos:* Select the photos you want to print in the Light Table.
- *To print the entire Light Table arrangement:* Deselect all photos in the Light Table by clicking the background.

- 3 Choose File > Print Light Table (or press Command-P).

The OS X Print dialog appears.

- 4 Choose Save as PDF from the PDF pop-up menu in the bottom-left corner of the dialog.

The Save dialog appears.

- 5 Enter a name for the PDF file in the Save As field, and choose a location to save the PDF file to from the Where pop-up menu.

- 6 Verify that the settings in the Save dialog are correct, then click Save.

A PDF file of your Light Table arrangement is saved to the location you chose in the Save dialog.

Creating and Modifying Print Presets

After examining a selected preset's print settings, you may want to change certain settings. You can do this by modifying an existing print preset and then saving it, or by duplicating an existing print preset and making changes to it. You use the presets stored in the Custom Presets area of the Print dialog to create and save your customized print presets.

Note: The settings modified in the Standard and Contact Sheets presets are reset to their default values each time the Print dialog is closed.

To create a new print preset using the Duplicate Preset command

You create new print presets by duplicating existing print presets and then making modifications to them.

- 1 Select a photo, then choose File > Print Images (or press Command-P).
The Print dialog appears.
- 2 In the Print dialog, select a print preset under Custom Presets that you want to duplicate, then choose Duplicate Preset from the Print Action pop-up menu (with a gear icon).
- 3 Enter a new name for the preset.
- 4 Modify the settings as appropriate, then choose Save Preset from the Print Action pop-up menu.

You can now select this preset whenever you need to use these print settings.

To modify an existing print preset

Any preset you created can be changed, either temporarily or permanently. If you change a preset's settings without saving it, the preset will revert to its original settings after the print job is processed. If you save the modified settings, the preset will retain the setting changes.

- 1 Select a photo, then choose File > Print Image (or press Command-P).
The Print dialog appears.
- 2 In the Print dialog, select the print preset that you created and want to modify under Custom Presets, then click the More Options button.
- 3 Modify the settings as appropriate.
- 4 When you're ready to save the preset, choose Save Preset from the Print Action pop-up menu (with a gear icon).

The print preset is saved with its new settings.

To delete a print preset

You can delete a print preset that you no longer use.

- 1 In the Custom Presets section of the Print dialog, select the preset you want to delete.
- 2 Choose Delete Preset from the Print Action pop-up menu (with a gear icon).
- 3 Confirm the deletion in the dialog that appears.

The preset is deleted from the Custom Presets list.

Proofing Your Images Onscreen

The printer, paper type, and color profile settings all affect the way your photos are printed. Onscreen proofing allows you to check the color in your photos, before you print them.

To use onscreen proofing, choose the proofing profile that most closely matches the characteristics of the final output device, and then turn on onscreen proofing. When onscreen proofing is turned on, the photo is converted using the selected profile before it is sent to the printer.

To choose a proofing profile

- Choose View > Proofing Profile, then choose the profile you want from the submenu.

To turn onscreen proofing on or off

- Choose View > Onscreen Proofing (or press Shift-Option-P).

When onscreen proofing is on, a checkmark appears beside the item in the View menu.

For more information about using the Aperture onscreen proofing feature, see [Setting Up the Viewer for Onscreen Proofing](#) on page 117.

Turning Off Color Management in Your Printer

For best results, you should turn off color management in your printer when printing a photo using Aperture. By default, most printers are set to convert the photo to the printer's color space. However, Aperture is designed to perform this conversion internally. Each printer manufacturer creates its own Print dialog. This means the setting for turning off color management in your printer varies depending upon the manufacturer of your printer and the printer model.

Note: If you have multiple printers connected to your computer, you should create a print preset and turn off color management for each printer.

To turn off color management for your printer

- Refer to the owner's manual that came with your printer.

An Overview of Exporting Photos

Using Aperture, you can export copies of originals, as well as versions that you've created. When you export photo versions, you can export them in JPEG, TIFF, PNG, and PSD file formats.

At export, you can rename files, resize and adjust images, and include metadata such as EXIF information, IPTC information, and keywords. You can also apply ColorSync profiles and watermarks to the versions you're exporting. You can export separate lists of metadata for selected photos as a file. You can also export originals with IPTC data stored in XMP sidecar files that can be used in other applications, such as Adobe Photoshop.

If you worked with audio and video clips in Aperture, you can export both the versions and the original files. If you trimmed the duration of the audio or video clips in Aperture, the edited duration is preserved in the exported versions.

Before exporting your photos to another application, a printing service, a client, or a website, you need to know what file types the recipient can use. You should also check with the recipient about other important information, including file size limitations, required image dimensions, and naming conventions. The key to a successful file transfer is anticipating—and avoiding—anything that can prevent the recipient from opening your files.

Aperture allows you to perform multiple export operations concurrently. However, to prevent unintended behavior, it's extremely important that you avoid making changes to the photos you are exporting until the operation is complete.

The easiest way to export photos is to use one of the Aperture export presets. Presets, or groups of export settings, allow you to efficiently export your photos. If the presets included with Aperture don't meet your needs, you can create your own. For example, if you regularly send groups of photos to a stock photography house and a printer, you can create an export preset for each destination. Give the presets a name you'll remember, and the next time you need to send photos to either destination, simply select the correct export preset.

You can also modify existing export presets and delete export presets you no longer use.

Aperture provides an easy way to transfer photos to another application for changes and then bring the revised photos back into Aperture. You can specify an application as an external editor in the Export pane of the Preferences window. For example, if your image editing sometimes requires one or more of the specialized tools available in Adobe Photoshop, you can select Photoshop as your external editor. You can then select a photo and choose Photos > Edit with External Editor. Aperture makes a new original and version of your photo and opens it in Adobe Photoshop. After you make your changes and save the image, the revised version automatically reappears in Aperture. The external editor doesn't change the previous original. For more information, see [Using an External Editor](#) on page 288.

You can also export projects, folders, and albums, as well as a combination of all three. Aperture consolidates the originals and versions of the items you selected in the Library inspector and exports them as a library, maintaining their organizational structure. Then you can merge the exported library into the Aperture library on another computer. For more information about merging libraries, see [Merging Libraries](#) on page 41.

Exporting Copies of Originals

When you export originals, duplicates of the files that were imported from your camera or other source are created; no adjustments, file modifications, or any other changes are exported with the file.

To export copies of originals

- 1 Select a photo or photos in the Browser.
- 2 Choose File > Export > Originals (or press Command-Shift-S).
- 3 In the dialog that appears, navigate to the location where you want the exported files placed.
- 4 Do one of the following:
 - Choose None from the Subfolder Format pop-up menu to specify that the originals be stored as separate files in the selected folder.
 - Choose a folder name preset from the Subfolder Format pop-up menu to specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files. For more information about creating folders to hold your exported photos, see [Exporting Photos into Folders in the Finder](#) on page 448.
 - Choose Custom Name or Custom Name with Counter from the Subfolder Format pop-up menu, then enter a custom folder name in the Custom Subfolder Name field.
- 5 Choose a name format for your originals from the Name Format pop-up menu.

For more information about selecting and setting up filenaming formats, see [Renaming Photos at Export](#) on page 450. Aperture shows an example of the selected name format in the dialog.

- 6 To export the originals with IPTC metadata, do one of the following:
 - *To write IPTC metadata into the original:* Choose Include IPTC from the Metadata pop-up menu.
 - *To create an XMP sidecar file that contains the photo's IPTC metadata:* Choose Create IPTC4XMP Sidecar File from the Metadata pop-up menu.
- 7 If you want to include audio attachments with your exported original files, select the Include Audio Attachments checkbox.
- 8 If you want to be notified when the export process is complete, select the "Show alert when finished" checkbox.
- 9 When you're ready to export your files, click Export Originals.

Copies of the originals for the selected photos are exported to the location you specified. If you selected the "Show alert when finished" checkbox, a dialog appears displaying the number of originals exported and the file path. If you want Aperture to open the Finder to the location where you exported your originals, click the Reveal in Finder button. Otherwise, click OK to close the dialog.

Exporting Photo Versions

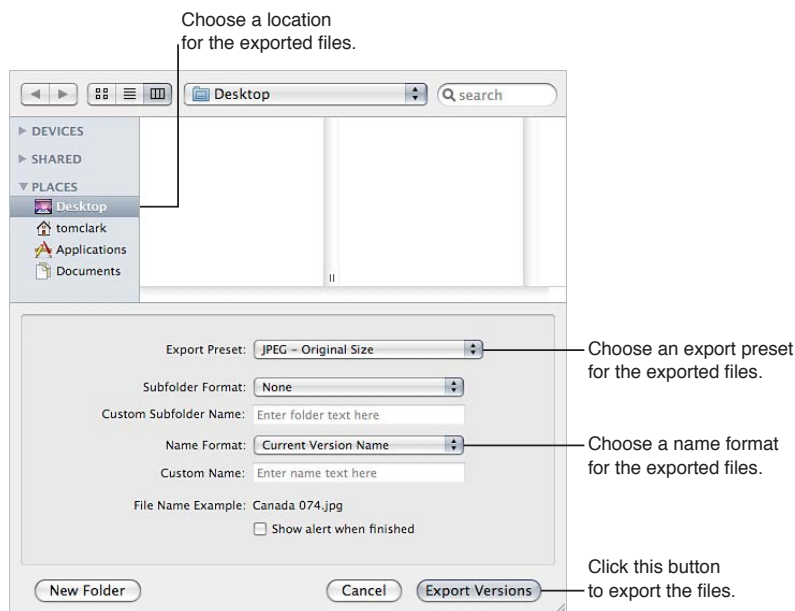
You can export photo versions that you've created in Aperture. For example, you might make adjustments to images for a specific purpose and then export them for use in another application. You can also rename photos when exporting them, make minor adjustments on export, add watermarks, and export photos with metadata. You can also quickly export photos to your email application to send them to others.

When you export photo versions, you can specify settings for the exported files, such as format, size, and filename.

Note: You can set Aperture to always include location information and names assigned to faces when exporting your photos. For more information about including Places and Faces information with your photos, see [Export Preferences](#) on page 594.

To export versions of photos

- 1 Select a photo or photos in the Browser.
- 2 Choose File > Export > Versions (or press Command-Shift-E).
- 3 In the dialog that appears, navigate to the location where you want the exported photos placed.



- 4 Choose an export preset from the Export Preset pop-up menu.

For more information on export presets, see [Viewing the Settings for an Export Preset](#) on page 442.

- 5 Do one of the following:

- Choose None from the Subfolder Format pop-up menu to specify that the versions be stored as separate files in the selected folder.
- Choose a folder name preset from the Subfolder Format pop-up menu to specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files. For more information about creating folders to hold your exported photos, see [Exporting Photos into Folders in the Finder](#) on page 448.
- Choose Custom Name or Custom Name with Counter from the Subfolder Format pop-up menu, then enter a custom folder name in the Custom Subfolder Name field.

- 6 Choose a name format for your files from the Name Format pop-up menu.

If you choose a Custom Name format, enter a name in the Custom Name field. For more information on renaming photos at export, see [Renaming Photos at Export](#) on page 450.

- 7 If you want to be notified when the export process is complete, select the “Show alert when finished” checkbox.

- 8 When you’re ready to export files, click Export Versions.

The photos you selected are exported to the location you specified. If you selected the “Show alert when finished” checkbox, a dialog appears displaying the number of versions exported and the file path. If you want Aperture to open the Finder to the location where you exported your versions, click the Reveal in Finder button. Otherwise, click OK to close the dialog.

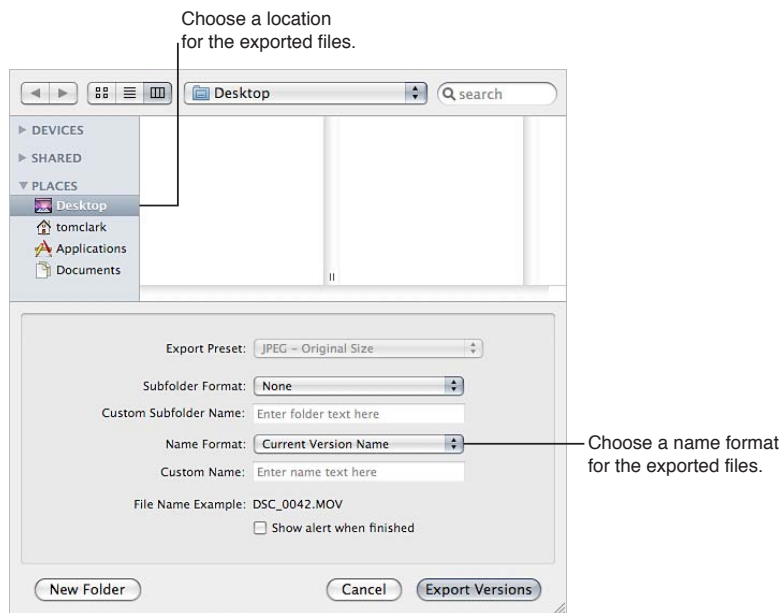
Note: If you want to check on the progress of an export operation, choose Window > Show Activity. The Activity window displays the progress of each export operation. You can also use this window to pause and cancel an export operation.

Exporting Audio and Video Versions

You can export edited versions of audio and video clips brought into Aperture. If you trimmed the length of the audio or video clip, the new edited length is exported along with any metadata you applied in Aperture.

To export versions of audio and video clips

- 1 Select audio or video clips in the Browser.
- 2 Choose File > Export > Version (or press Command-Shift-E).
- 3 In the dialog that appears, navigate to the location where you want the exported audio or video files placed.



4 Do one of the following:

- Choose None from the Subfolder Format pop-up menu to specify that the clips be stored as separate files in the selected folder.
- Choose a folder name preset from the Subfolder Format pop-up menu to specify that Aperture create a hierarchy of subfolders with specific folder names to hold your files. For more information about creating folders to hold your exported audio and video files, see [Exporting Photos into Folders in the Finder](#) on page 448.
- Choose Custom Name or Custom Name with Counter from the Subfolder Format pop-up menu, then enter a custom folder name in the Custom Subfolder Name field.

5 Choose a name format for your files from the Name Format pop-up menu.

If you choose a Custom Name format, enter your custom name in the Custom Name field.

For more information on renaming audio and video files at export, see [Renaming Photos at Export](#) on page 450.

6 If you want to be notified when the export process is complete, select the “Show alert when finished” checkbox.

7 When you’re ready to export files, click Export Versions.

The audio or video clips you selected are exported to the location you specified. If you selected the “Show alert when finished” checkbox, a dialog appears displaying the number of versions exported and the file path. If you want Aperture to open the Finder to the location where you exported your clips, click the Reveal in Finder button. Otherwise, click OK to close the dialog.

Note: If you want to check on the progress of an export operation, choose Window > Show Activity. The Activity window displays the progress of each export operation. You can also use this window to pause and cancel an export operation.

Exporting Projects, Folders, and Albums

You can select and export any combination of projects, folders, and albums in the Library inspector. Aperture consolidates the selected items into an Aperture library and places it in the location of your choosing. After exporting the item selection as an Aperture library, you can either open the new library and work within it, or you can merge the library into the library of another Aperture system.

For more information about opening Aperture libraries, see [Viewing Other Libraries](#) on page 40.

For more information about merging Aperture libraries, see [Merging Libraries](#) on page 41.

To export projects, folders, and albums

- 1 In the Library inspector, select the items you want to export, then choose File > Export > Items as New Library.

Aperture consolidates the selected items into a library.

- 2 Enter a name and choose a location for the exported library.
- 3 Do any of the following:
 - *If your project contains referenced images and you want the original files available to the new Aperture system:* Select the “Consolidate originals into exported library” checkbox to copy the original image files into the new library file.
 - *If you want to copy the previews into the new library so that you don’t have to rebuild them on the new Aperture system:* Select the “Include Previews in exported library” checkbox.
 - *If you want Aperture to alert you when it has finished building the new library:* Select the “Show alert when finished” checkbox.
- 4 Click Export Library.

Aperture consolidates the selected items into a library and exports the library file to the location you chose.

Working with Export Presets

Viewing the Settings for an Export Preset

Export presets are groups of saved export settings that help you quickly and easily export your photos. Aperture comes with numerous export presets, and you can also create your own.

Before using an export preset, whether it's one that comes with Aperture or one that you created, you can view its settings to make sure they are exactly what you want.

To view the settings for an export preset

Do one of the following:

- Choose Aperture > Presets > Image Export.
- With a photo selected, choose File > Export > Version (or press Command-Shift-E) and in the dialog that appears, choose Edit from the Export Preset pop-up menu.

The Image Export dialog appears, listing the presets available and the configurable export settings.

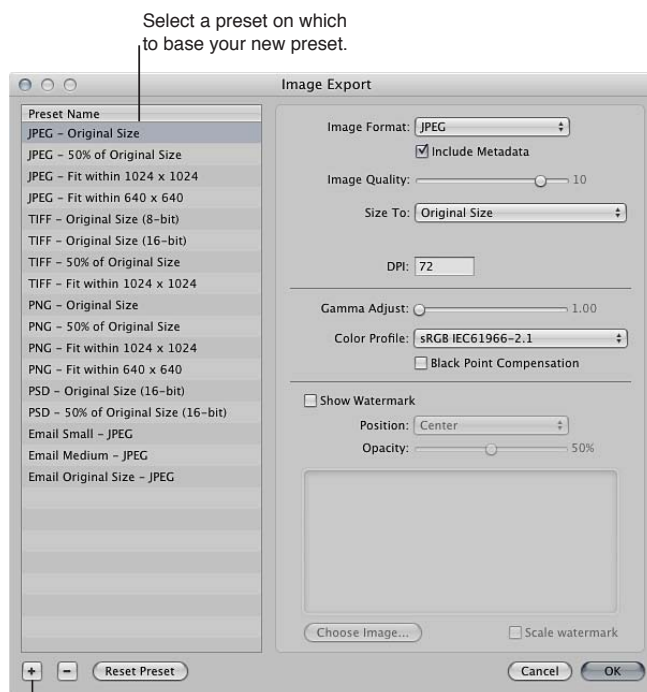
Creating an Export Preset

If none of the predefined export presets suits your needs, you can create your own export preset. An easy way to create a new export preset is to copy an existing preset and then modify the copy.

To create a new export preset

- 1 Choose Aperture > Presets > Image Export.

The Image Export dialog appears.



- 2 Select an export preset on which to base your new preset, then click the Add (+) button.

A new preset appears highlighted in the Preset Name list.

- 3 Enter a name for the new preset, then press Return.
- 4 Change the export settings as required, then click OK.

Modifying an Export Preset

You can modify existing presets when you need to. The next time you export using that preset, Aperture remembers your modified settings and exports your photos accordingly.

To modify an existing preset

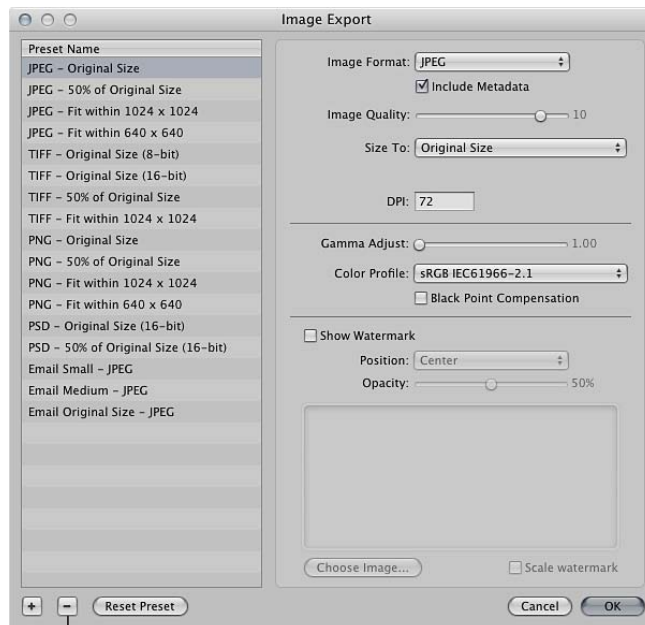
- 1 Choose Aperture > Presets > Image Export.
The Image Export dialog appears.
- 2 Select the preset you want to modify and change its settings as required, then click OK.

Deleting an Export Preset

You can delete an export preset when you no longer need it.

To delete an export preset in the Image Export dialog

- 1 Select the preset, then click the Remove (–) button.



Click the Remove button to delete the selected preset.

- 2 In the dialog that appears, click Delete.
The preset disappears from the Preset Name list.
- 3 Click OK.

The preset is permanently deleted.

Note: If you click the Delete button and then click Cancel, the preset reappears the next time you open the Image Export dialog.

Setting Image Resolution When Exporting

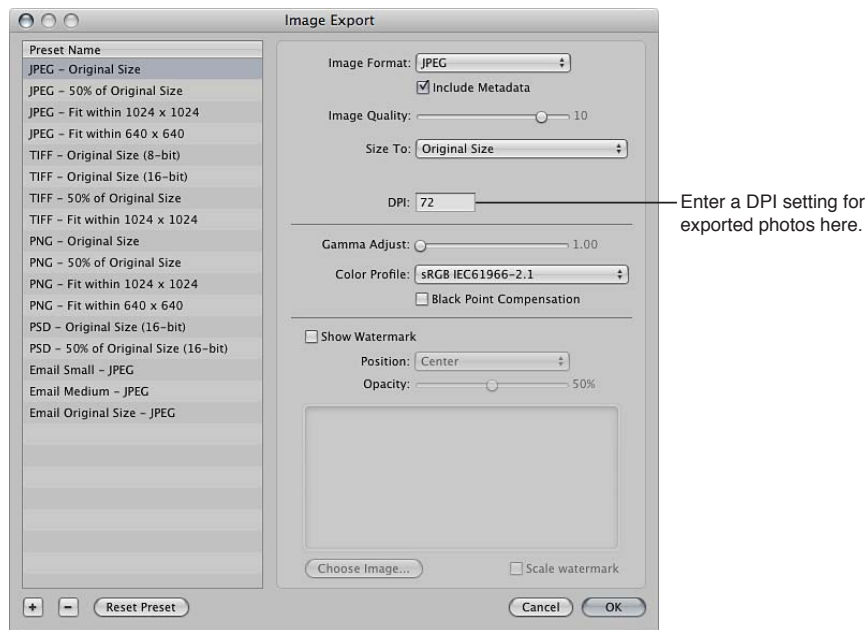
You can set the image resolution you want for exported photos in the Image Export dialog in several ways: by specifying a dpi setting, by specifying a percentage of the original, or by specifying photo dimensions in inches, centimeters, or pixels. First you select an export preset, and then you specify a resolution for that preset.

To specify the dpi setting for exported photos in an export preset

1 Do one of the following:

- Choose Aperture > Presets > Image Export.
- Choose File > Export > Versions (or press Command-Shift-E), then choose Edit from the Export Preset pop-up menu.

The Image Export dialog appears.



2 Select an export preset or create a new one, then enter a dpi setting.

For more information on creating export presets, see [Creating an Export Preset](#) on page 442.

3 Specify additional settings as necessary, then click OK.

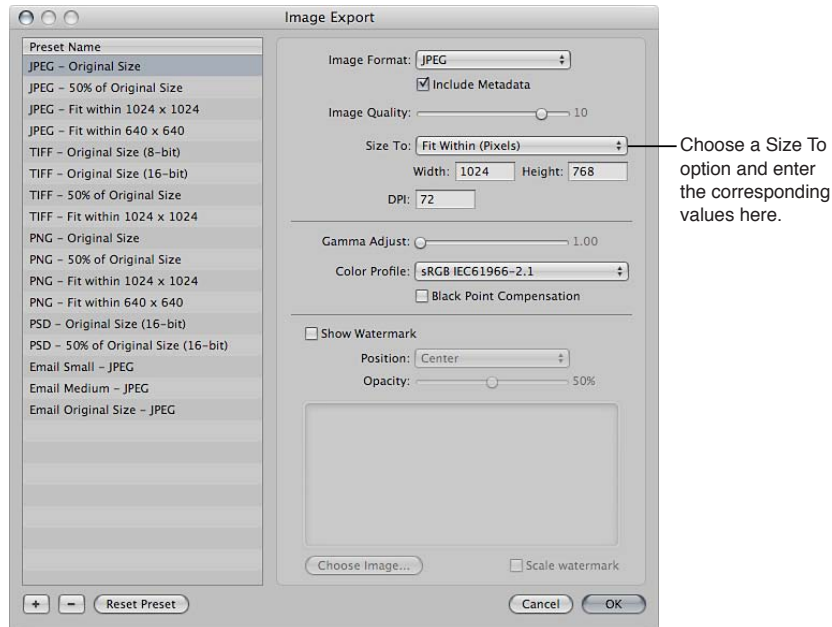
Use this export preset when you need to export versions at the resolution specified in the DPI field. Create a new preset when a new dpi setting is required.

To create an export preset constraining photos to a specific size at export

1 Do one of the following:

- Choose Aperture > Presets > Image Export.
- Choose File > Export > Versions (or press Command-Shift-E), then choose Edit from the Export Preset pop-up menu.

The Image Export dialog appears.



2 Select an export preset or create a new one.

For more information on creating export presets, see [Creating an Export Preset](#) on page 442.

3 Choose an item from the Size To pop-up menu, then specify the size of the photo by entering values in the fields that appear below it.

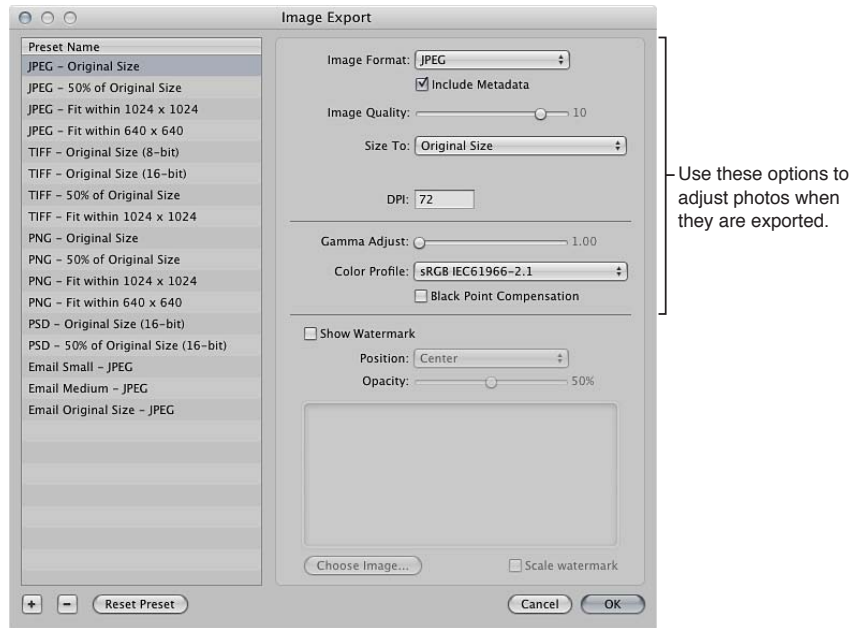
4 Specify additional settings as necessary, then click OK.

Use this export preset when you need to export photos at a specific size. Create a new preset when new dimensions are required.

Adjusting Images at Export

You can apply final adjustments to images at export by choosing ColorSync profiles, setting gamma adjustments, and applying black point compensation. Because these adjustments are applied at export, the photo versions and originals in the Aperture library are not changed. Only exported files receive image adjustments applied with an export preset.

To adjust images at export, you create a new export preset in the Image Export dialog and then modify the Image Quality, Gamma Adjust, ColorSync Profile, and Black Point Compensation settings as appropriate.



Gamma adjustments applied at export are applied on top of gamma adjustments previously applied to photo versions. Before exporting, verify that you are not doubling any gamma adjustments previously applied to your photos.

When you export, select the preset that includes the adjustments you want to make.

To create an image export preset to adjust images at export

- 1 Do one of the following:
 - Choose Aperture > Presets > Image Export.
 - Choose File > Export > Versions (or press Command-Shift-E), then choose Edit from the Export Presets pop-up menu.

The Image Export dialog appears.

- 2 Select an export preset, or create a new one.

For information about creating export presets, see [Creating an Export Preset](#) on page 442.

- 3 Specify adjustment options:
 - *To add a gamma adjustment to the exported photos:* Drag the Gamma Adjust slider to the right.
 - *To change the ColorSync profile applied to the exported photos:* Choose a profile from the Color Profile pop-up menu.
 - *To apply black point compensation to the exported photos:* Select the Black Point Compensation checkbox.
- 4 Specify additional settings as necessary, then click OK.

Use this export preset when you want to export photos with the adjustments you specified.

Adding a Watermark at Export

A watermark is a visible graphic overlay that is applied to a photo. Photographers often use watermarks to indicate that the photos are protected by a copyright and to discourage others from inappropriately using their photos.

You can import a graphics file and add it to your photos as a watermark.

Use the following guidelines to create high-quality watermarks for your photos:

- Save your watermark as a PSD (Photoshop) file with a transparent background.
- Create multiple sizes of your watermark so that you can select the one that is the best match for the output size of the exported photo.

Note: If a watermark file is larger than the photo you want to export, Aperture automatically scales the watermark down to fit the photo. (Aperture does not scale watermarks up.)
- After you create a watermark, save it as part of an export preset so you can reuse it as often as you need.

To add a watermark image to your exported photos

- 1 Select the photos you want to export.
- 2 Choose File > Export > Versions (or press Command-Shift-E).
- 3 In the dialog that appears, choose Edit from the Export Preset pop-up menu.
- 4 In the Image Export dialog, select the export preset you want to use to export your photos.
- 5 Select the Show Watermark checkbox.
- 6 Click the Choose Image button.
- 7 Select the image you want to use as a watermark, then click Choose.
- 8 Specify where you want the watermark to appear on the photo using the Position pop-up menu.
- 9 To adjust the opacity of the watermark, drag the Opacity slider to a new position.
- 10 If you want the watermark to be scaled in proportion to the photo's output size, select the "Scale watermark" checkbox.
- 11 When you're satisfied with how your watermark appears in the watermark preview area, click OK.
- 12 Navigate to the location where you want the exported photos placed.
- 13 Choose a name format for your exported files from the Name Format pop-up menu.
- 14 Click Export Versions.

Your files are exported with the watermark you created.

Applying IPTC Metadata and Keywords to Your Photos

Many publications use a standard set of image keywords; the American Newspaper Publishers Association (ANPA) wire codes, developed by the Newspaper Association of America, are one example. You can apply these keywords to your photos when exporting to JPEG, TIFF, and PSD file formats.

Remember that applying metadata at export applies all the metadata attached to your photo. If your photo version has metadata that you don't want exported, create a new photo version that only includes the metadata you intend to export.

Note: The PNG file format does not support the inclusion of metadata.

To create an image export preset that includes metadata with exported photos

- 1 Do one of the following:
 - Choose Aperture > Presets > Image Export.
 - Choose File > Export > Versions (or press Command-Shift-E), then choose Edit from the Export Presets pop-up menu.

The Image Export dialog appears.

- 2 In the Image Export dialog, select the export preset you want to use to export your photos, or create a new one.

For more information about creating export presets, see [Creating an Export Preset](#) on page 442.

- 3 Select the Include Metadata checkbox.

Note: This checkbox is dimmed when PNG is chosen in the Image Format pop-up menu.

- 4 Click OK.

The version metadata is included in your exported photos when this export preset is chosen.

Exporting Photos into Folders in the Finder

When you export versions and originals, you can have Aperture place the files individually into a selected folder or create subfolders to hold the files. For example, you might have the exported files placed in subfolders identified by date. You can create folder name formats that you can quickly choose to select the folder structure you want.

To create a folder name preset, you select the name elements you want in the Folder Naming dialog. You can compose subfolder name formats that combine the following name elements:

- Version Name
- Original File Name
- Sequence Number (1 of 3, 2 of 3, 3 of 3, and so on)
- Image Year
- Image Month
- Image Day
- Image Date
- Image Time
- Index Number (1, 2, 3, and so on)
- Custom Name
- Counter (001, 002, 003, and so on)

- Folder Name
- Current Date
- Current Time
- Current Year
- Current Month
- Current Day
- Project Name
- / (slash)

You can specify a combination of name elements to create custom folder names.

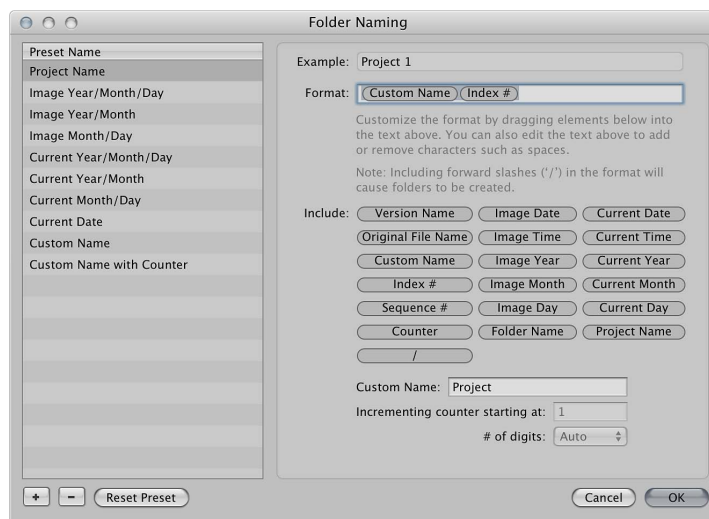
You can also create a hierarchy of folders within folders. For example, you can specify that Aperture place your photos in a subfolder named Date, and within that folder you can create subfolders identified by the time the photo was taken. To create the folder name format, you drag the elements you want into the Format field and drag the slash element between the elements where a subfolder should be created.

To create a folder name preset

1 Do one of the following:

- Choose Aperture > Presets > Folder Naming.
- In the Export dialog, choose Edit from the Subfolder Format pop-up menu.

The Folder Naming dialog appears.



- 2 Click the Add (+) button to create a new folder name format, or select the preset folder name format you want to change.
- 3 Drag the name elements you want into the Format field in the order you want them.
- 4 Drag a slash between the elements where you want subfolders created.

- 5 Enter a custom name in the Custom Name field, if you wish.

Note: The Custom Name field is dimmed unless “Custom Name” is one of the elements in the Format field.

- 6 Click OK.

Your new folder name format now appears in the Subfolder Format pop-up menu.

To reset the starting number of a counter in a folder name preset

When using a counter in your folder name format, you can specify the starting number and the number of digits, from 1 to 6, that appear in the counter. When you use a folder name format with a counter, make sure to reset the initial starting number, if necessary. Otherwise, on the next export Aperture will continue numbering the folders containing the exported photos starting from the last number of the previous export.

- In the Folder Naming dialog, type 0 (zero) in the “Incrementing counter starting at” field.

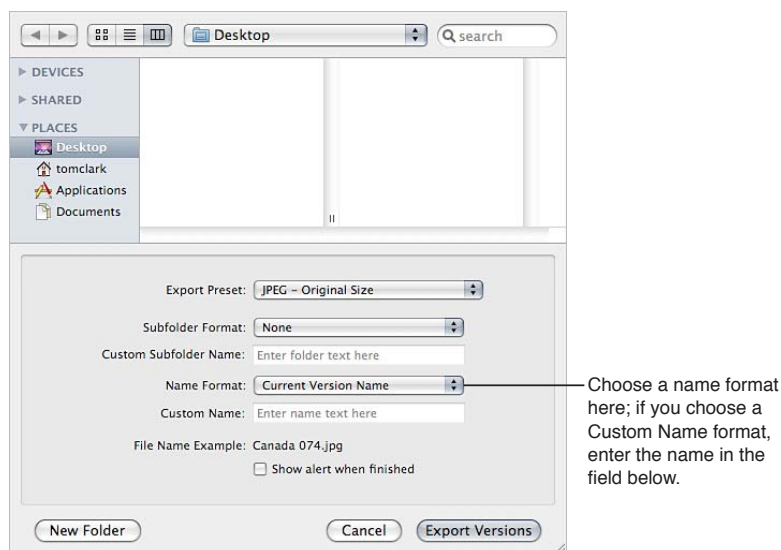
Renaming Photos at Export

When you export a large group of photos, the exported files often have nonsequential names. You can rename your photos at export, giving them more meaningful names.

For example, suppose you want to export photos LA 031, LA 441, LA 686, and LA 894 from photo group LA 001 to LA 1061. You can use the Custom Name with Index name format to rename your photos LA 1, LA 2, and so on.

To rename photos at export

- 1 Select the photo or photos you want to export.
- 2 Do one of the following:
 - *To export originals and rename them:* Choose File > Export > Originals (or press Command-Shift-S).
 - *To export versions and rename them:* Choose File > Export > Versions (or press Command-Shift-E).
- 3 In the Export dialog, navigate to the location where you want the exported photos placed.
- 4 Choose a name format from the Name Format pop-up menu.



If you choose a Custom Name format, enter your custom name in the Custom Name field.

- 5 When you're ready to export files, click either Export Originals or Export Versions.

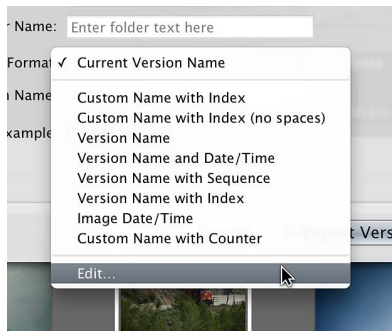
The files are exported with the name format you specified.

To create a new name format

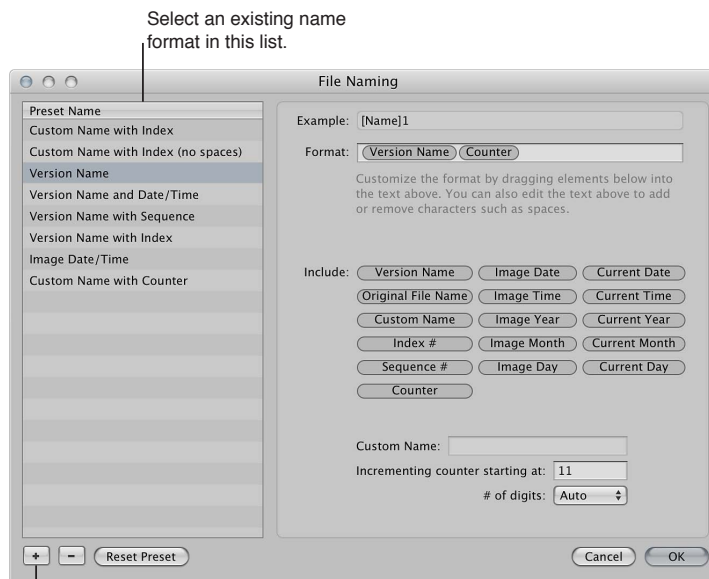
If none of the preset name formats meets your needs, you can create a new name format. For example, you could create a name format that uses a custom name, the index number, and the date.

- 1 Do one of the following:
 - Choose Aperture > Presets > File Naming.
 - Choose File > Export > Versions (or press Command-Shift-E), then choose Edit from the Name Format pop-up menu.

The File Naming dialog appears.



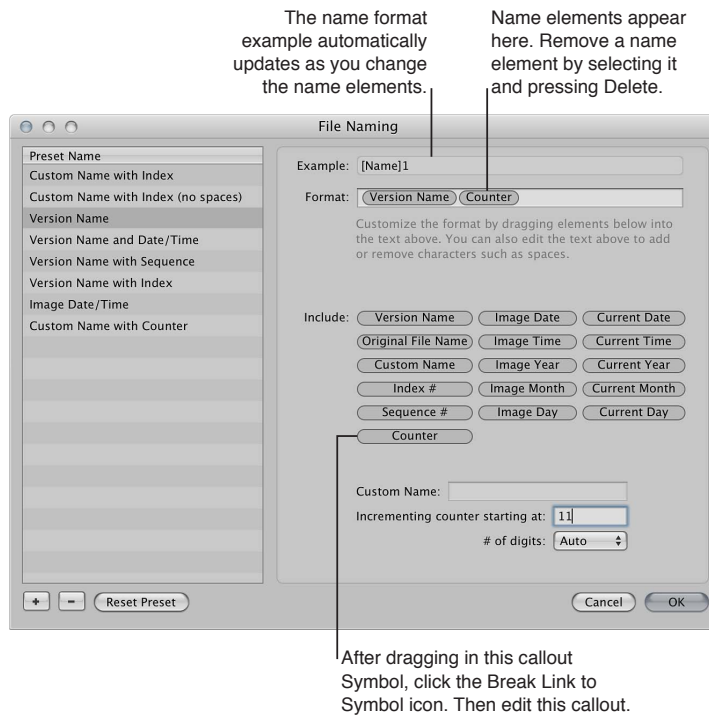
- 2 In the Preset Name list, select an existing name format on which to base the new name format, then click the Add (+) button.



A copy of the selected name format is created.

- 3 Enter a name for the new preset, then press Return.
- 4 Add name elements by dragging the elements from the Include area to the Format field.

If necessary, enter relevant naming information in the fields provided. Remove name elements from the Format field by selecting them and pressing Delete. You can also type characters directly in the Format field.



As you add or delete name elements, the Example field automatically updates.

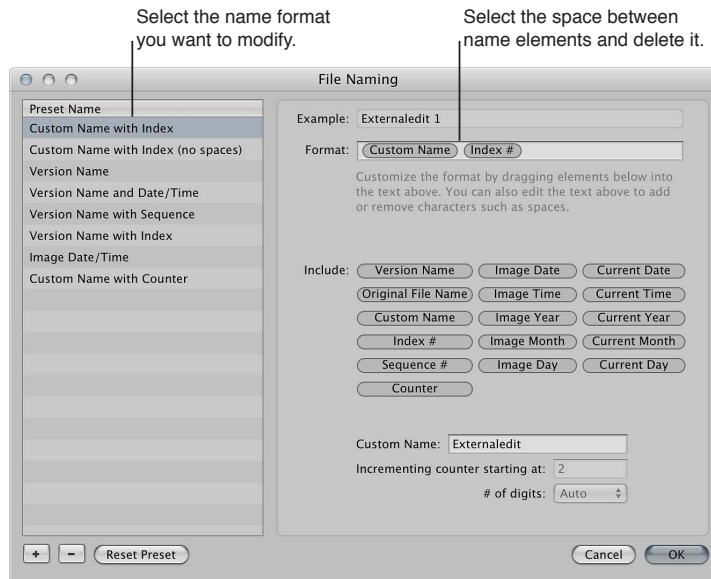
- 5 When you're satisfied with the new name format, click OK.

The new name format appears in the Name Format pop-up menu.

To modify a name format to remove spaces

When exporting photos for specific uses, such as for use on websites, you may need to use filenames without spaces so that the filenames are compatible with the intended application or website. Aperture adds spaces to filenames depending on the name format you use. You can easily modify name formats to remove spaces from filenames.

- 1 Choose Aperture > Presets > File Naming.
- 2 In the File Naming dialog, select the preset name format you want to modify.



- 3 In the Format field, select and delete the spaces or characters between the name elements. If you wish, you can also add spaces or characters between name elements.
- 4 Click OK.

Exporting Metadata in a Separate File

You can select photos and export the IPTC metadata assigned to them in a tab-delimited text file. The text file also lists the version names, ratings, keywords, and color labels assigned to the photos in Aperture.

For more information about IPTC metadata, see [About IPTC Metadata](#) on page 195.

To export photo metadata in a text file

- 1 Select the photos whose metadata you want to export.
- 2 Choose File > Export > Metadata.
- 3 Enter a name for the text file in the Save As field, select the location where you want the file stored, then click Export Metadata.

Aperture exports the metadata information as a standard Unicode text file that you can open and use with any application that uses text files.

Exporting Using Plug-ins

Some applications, social networking sites, and photography services supply plug-ins that allow Aperture to export files automatically with the format and settings the application or service requires. For example, a stock photography service or print lab may require that photos be transferred at a specific size, in a specific file format, or with particular types of metadata. Such a service can create its own plug-in that automatically sets up Aperture to export files with precisely the characteristics the service needs.

To use an export plug-in, you must first obtain the plug-in software from the service or application vendor and install it. You can find a list of available plug-ins by connecting to the Internet and choosing Aperture > Aperture Plug-ins. Third-party plug-ins for Aperture are stored in the following location: /Library/Application Support/Aperture/Plug-ins/Export/.

To export photos using a third-party plug-in

- 1 Select the photos you want to transfer.
- 2 Choose File > Export, then select the plug-in that you want to use.

Exporting by Dragging

You can export photo, audio, and video versions by dragging them from the Browser or Library inspector to the desktop or any location in the Finder. You can also do the same with projects, albums, and folders in the Library inspector. However, Flickr and Facebook albums cannot be exported by dragging.

Note: A photo version without a JPEG preview cannot be exported via the drag-and-drop method. If the version doesn't have a preview, dragging and dropping is disabled for that version (except within Aperture). If you are dragging multiple photos, but only some of them have previews, only the versions with previews are dragged out. The quality of the JPEG image is determined by the Previews settings in Aperture preferences. For more information, see [An Overview of Preview Images](#) on page 118.

To export versions from Aperture by dragging

- 1 In the Browser, select the photo, audio, and video versions you want to export.
- 2 Drag the versions to the desktop or any location in the Finder.

To export items in the Library inspector by dragging

- 1 In the Library inspector, select the items you want to export by Shift-clicking adjacent items and Command-clicking nonadjacent items.
- 2 Drag the items to the desktop or any location in the Finder.

The exported items are consolidated into a single Aperture library. The library is named after the item that appears at the highest point (from top to bottom) in the Library inspector. If an album is selected for export, the album and the project to which it is subordinate are exported, but only the versions within the album are exported. Any other photos in the project are left out of the export.

If you want to rename the exported library, double-click the library file's name and enter a new name.

WARNING: In rare instances, color shifts between exported photos may occur when the Camera Previews option is selected in the Import pane of the Aperture Preferences window. This color shift happens because some RAW photos have fully rendered previews, and others still use the camera's RAW thumbnail. To prevent this from happening, view all photos you want to export in the Viewer, and Aperture generates a fully rendered preview for each photo. For more information, see [An Overview of Preview Images](#) on page 118 and [Import Preferences](#) on page 593.

An Overview of Slideshows

With Aperture, you can easily create and present slideshows of your photos. You can use two main methods to create slideshows in Aperture. You can quickly create a slideshow from a selection of photos, or you can create an advanced multimedia presentation complete with video clips, a layered soundtrack, and customized titles, borders, transitions, and effects.

To create an impromptu slideshow based on a photo selection and play it on your computer, you use slideshow presets. Slideshow presets are collections of predefined slideshow settings that determine the overall look of your slideshow and how your photos appear on the screen. Aperture provides a number of slideshow presets, and you can also create your own custom presets. Slideshow presets are convenient when you're sitting with a client or friend and you want to give a basic presentation of your photos, but you don't need to save the slideshow. For more information about playing slideshows using slideshow presets, see [An Overview of Slideshow Presets](#) on page 457.

When you want to create a more elaborate multimedia presentation or when you want to export your slideshow as a movie for others to view, you create a slideshow album and use the Slideshow Editor to edit the slideshow. Aperture provides themes that you can apply to your slideshow to give it a professional look, and you can also include video clips, create a layered soundtrack, and customize elements such as titles, borders, transitions, and effects. You can play the slideshow on your computer, or you can export the slideshow as a movie to share with others via email or the web. You can also send your slideshow directly to iTunes for syncing with iPhone, iPod, iPod touch, iPad, or Apple TV.

Note: Aperture slideshow themes automatically scale to fit panoramic photos.

Important: Aperture slideshows cannot be edited in iPhoto. To modify an Aperture slideshow, you must open your Aperture library in Aperture and then edit the slideshow.

For more information about creating slideshow presentations using the Slideshow Editor, see the following sections:

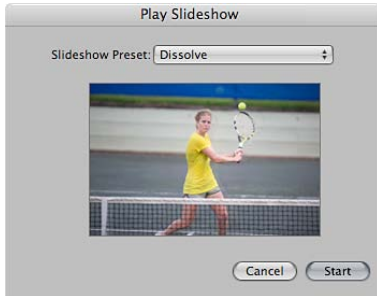
- [Workflow for Creating a Multimedia Slideshow Presentation](#) on page 464
- [Creating Slideshow Albums](#) on page 465
- [Changing a Slideshow's Theme](#) on page 467
- [About Editing Slideshow Transitions and Applying Effects](#) on page 468
- [An Overview of Modifying the Entire Slideshow](#) on page 469
- [An Overview of Modifying Individual Slides and Transitions](#) on page 475
- [An Overview of Adding Music and Audio to Slideshows](#) on page 483
- [Viewing Your Slideshows in Aperture](#) on page 491
- [Sharing Your Slideshow Movies](#) on page 492

Playing Slideshows Using Slideshow Presets

An Overview of Slideshow Presets

To play a slideshow using a slideshow preset, you select an item in the Library inspector or individual photos in the Browser and then choose File > Play Slideshow (or press Shift-S).

When the Play Slideshow dialog appears, you can specify how you want photos displayed by choosing a slideshow preset.



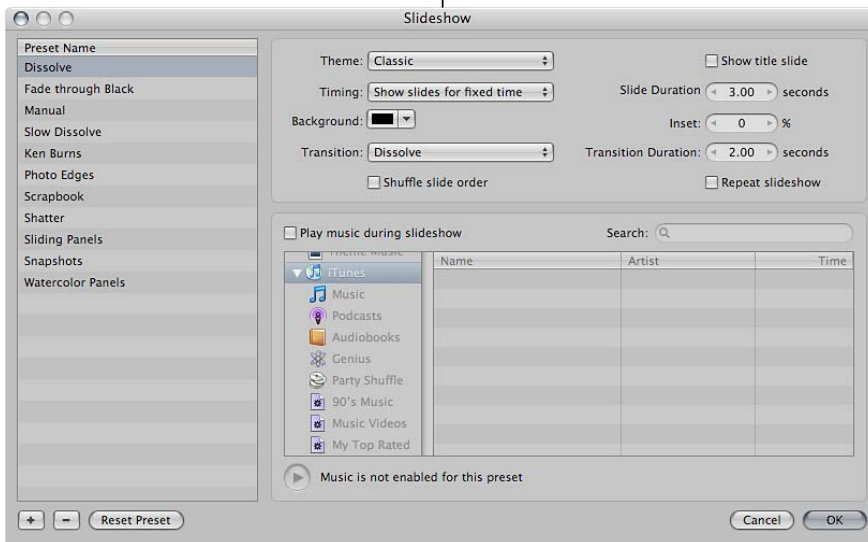
Slideshow presets are groups of predefined settings for playing a slideshow. For example, you can choose a slideshow preset to change the theme or apply transitions and timing to your onscreen presentation.

Aperture provides several slideshow presets from which to choose. When you choose a preset from the Slideshow Preset pop-up menu, a preview of the slideshow preset plays below the pop-up menu.

You can also create your own custom presets. For example, to prepare for a presentation, you could create two new slideshow presets: one for your presentation and the other for your question-and-answer period. The presentation slideshow can be manually controlled, allowing you to move through the photos at your own pace. Your second slideshow preset, to be used during the question-and-answer period of your presentation, can display the same photos using the Sliding Panels theme set to show each photo for 15 seconds, with music and looping applied.

To create or modify a slideshow preset, you choose Aperture > Presets > Slideshow (or choose Edit from the Slideshow Preset pop-up menu in the Play Slideshow dialog), and the Slideshow dialog appears.

The Slideshow dialog lets you create or modify slideshow presets.



You can then select a slideshow preset or create a new one, specifying the settings you want.

Playing a Slideshow Using a Preset

You can easily set up a slideshow by selecting the photos you want and then choosing a slideshow preset.

Important: To display slideshows at the best quality, you should set Aperture to create high-resolution previews. In addition to setting previews to their highest resolution, you should also use full-size previews to prevent upscaling with large displays. If previews are not available, photos in the slideshow may not be as sharp as they would be otherwise. For more information about creating high-resolution previews, see [An Overview of Preview Images](#) on page 118.

To create and play a slideshow

- 1 Select a set of photos by doing one of the following:
 - Select an item in the Library inspector.
 - Select individual photos or photo stacks in the Browser.
- 2 Choose File > Play Slideshow (or press Shift-S).

The Play Slideshow dialog appears.



- 3 Choose a preset from the Slideshow Preset pop-up menu.

Note: Additional slideshow presets appear in the Slideshow Preset pop-up menu for use in Aperture when iPhoto '11 is installed.

When you choose a preset from the Slideshow Preset pop-up menu, a preview of the slideshow preset plays below the pop-up menu.

- 4 Click Start.

If either no photo or a single photo is selected, the slideshow displays all photos in the current album or project.

Important: You can save slideshows and share them by creating a slideshow album and then placing the photo versions for your slideshow in it. For more information, see [Creating Slideshow Albums](#) on page 465.

Controlling a Slideshow

Once you start playing a slideshow, you can use keyboard shortcuts to control the slideshow.

To pause the slideshow

- Press the Space bar.

To continue playing the slideshow

- Press the Space bar again.

To move forward through the slideshow

- Press the Right Arrow key.

To move backward through the slideshow

- Press the Left Arrow key.

To stop the slideshow

- Press Esc (Escape).

The slideshow stops playing, and the Aperture workspace reappears.

Arranging the Order of a Slideshow's Photos

You can arrange the order in which the photos in a slideshow are presented.

To arrange the order of a slideshow's photos

- Before creating the slideshow, arrange the thumbnail images in the Browser in the order in which you want them to appear in the slideshow.

You can then play the slideshow by following the instructions in [Playing a Slideshow Using a Preset](#) on page 458.

Controls in the Slideshow Dialog

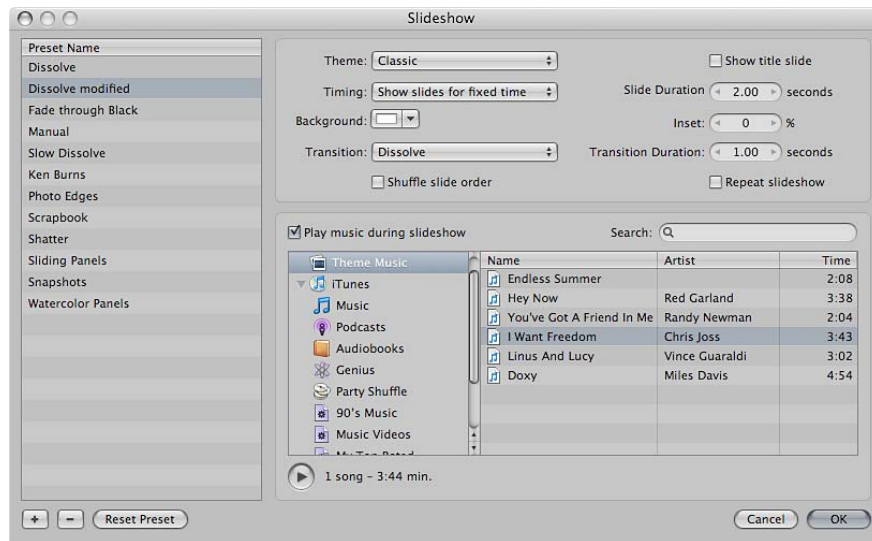
The Slideshow dialog contains options for creating and modifying slideshow presets. In it, you can choose how many photos to display at a time, how those photos are arranged, and how long each photo is displayed in your slideshow. You can also choose to play slideshows on one or two displays, with custom background colors and music.

To open the Slideshow dialog

Do one of the following:

- Choose Aperture > Presets > Slideshow.
- Choose File > Play Slideshow (or press Shift-S), then choose Edit from the Slideshow Preset pop-up menu in the Play Slideshow dialog.

The Slideshow dialog appears.



- *Preset Name list*: Displays the list of current slideshow presets.
- *Theme pop-up menu*: Choose a theme for your slideshow preset from this pop-up menu.
- *“Show title slide” checkbox*: Select this checkbox to display a title slide at the beginning of the slideshow. Aperture automatically generates the title using the name of the item selected in the Library inspector.
- *Timing pop-up menu*: Choose how the slideshow duration is determined. There are three options: fitting the slideshow to the duration of the music, showing each photo for a fixed time, or advancing photos manually.
- *Slide Duration value slider*: Use this value slider to determine the minimum amount of time each photo is shown.
- *Background color well*: Change the background color of your slideshow by clicking the Background color well and then selecting a new background color from the Colors window, or click the disclosure button (to the right of the color well) and select a new background color from the pop-up color palette.
- *Inset value slider*: Use this value slider to adjust the space between the edges of the screen and the photos.
- *Transition pop-up menu*: Choose the type of transition that occurs between the slides.
- *Transition Duration value slider*: Use this value slider to adjust the length of applied transitions. The duration setting is applied uniformly to each transition.

- *“Shuffle slide order” checkbox*: Select this checkbox to have Aperture shuffle the order of the photos presented in the slideshow.
- *“Repeat slideshow” checkbox*: Select this checkbox to loop, or continuously play, your slideshow. If you select this option, you must stop your slideshow manually by pressing Esc.
- *“Play music during slideshow” checkbox*: Select this checkbox to play your slideshow with an accompanying song or iTunes playlist.
- *Audio browser area*: Displays sample music and slideshow theme music selections, as well as music from GarageBand, your iTunes library, and any audio imported into the Aperture library. Navigate to a song to accompany your slideshow, or search for a song name, artist, or song time by entering information in the search field. You can also preview DRM-free music by clicking the Play button.
- *OK button*: Click this button to apply any changes made to the selected slideshow preset.
- *Cancel button*: Click this button to cancel the changes made to the selected slideshow preset.
- *Reset Preset button*: Click this button to reset the selected slideshow preset to its original settings.
- *Remove (-) button*: Click this button to remove an unwanted slideshow preset from the Preset Name list.
- *Add (+) button*: Click this button to create a new slideshow preset based on the preset selected in the Preset Name list.

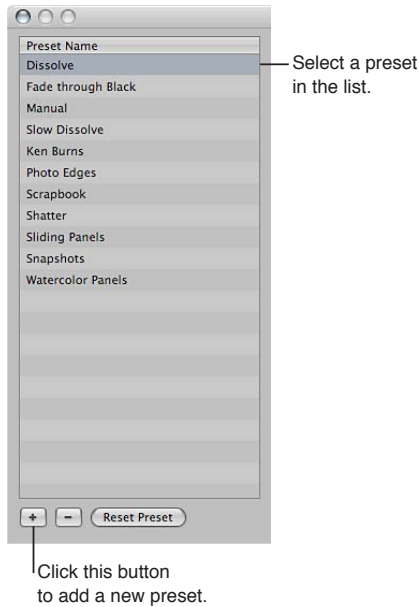
Creating Slideshow Presets

You create a new slideshow preset by duplicating an existing preset and then modifying it. First, identify which existing preset you want to model your new preset on. After duplicating the preset and renaming the duplicate, you can easily customize your new slideshow preset’s settings.

To create a new slideshow preset

- 1 Choose Aperture > Presets > Slideshow.
The Slideshow dialog appears.
- 2 Select a preset in the Preset Name list on which to model your new preset.

- 3 In the bottom-left corner of the dialog, click the Add (+) button.



A copy of the slideshow preset appears highlighted in the Preset Name list.

- 4 Enter a new name for the copied slideshow preset, then press Return.
- 5 When you've finished specifying the slideshow settings you want, click OK.

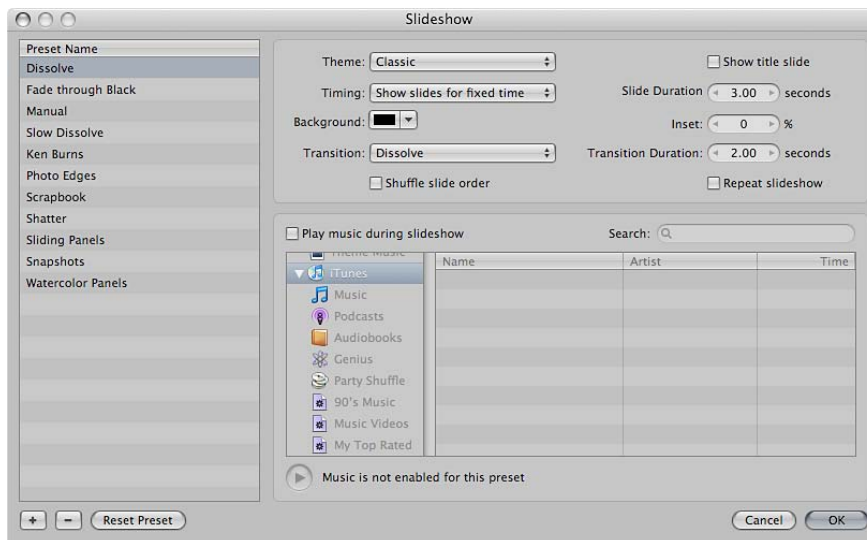
Modifying Slideshow Presets

You can modify slideshow presets to create custom slideshow presentations.

To modify an existing preset

- 1 Choose Aperture > Presets > Slideshow.

The Slideshow dialog appears.



- 2 Select the preset you want to modify in the Preset Name list.
- 3 Modify the slideshow preset's settings as appropriate.
- 4 When you've finished modifying settings for the slideshow preset, click OK.

To revert to the preset's original settings

- 1 In the Slideshow dialog, select the preset whose settings you want to revert.
- 2 Click the Reset Preset button.

Using Slideshow Presets to Play Slideshows with Music

Adding music to your slideshow can increase your audience's enthusiasm and participation. You can easily add DRM-free music from your iTunes music library to accompany your slideshow.

To add music to your slideshow presentation

- 1 Select a set of photos to be displayed in your slideshow.
- 2 Choose File > Play Slideshow (or press Shift-S).

The Play Slideshow dialog appears.

- 3 Choose Edit from the Slideshow Preset pop-up menu.

The Slideshow dialog appears.

- 4 Do one of the following:

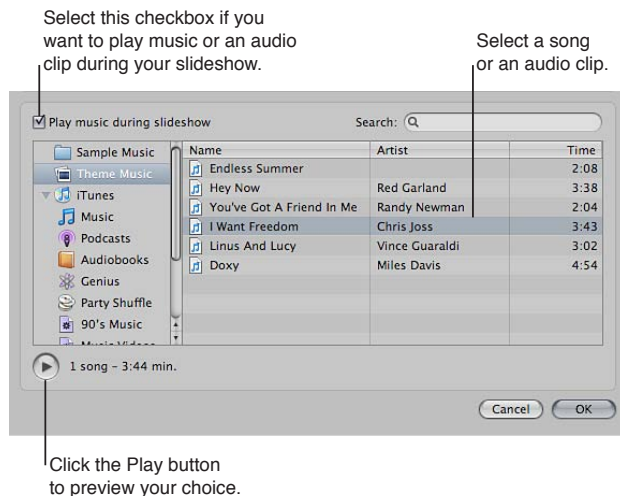
- Select a slideshow preset to modify.

For more information about modifying existing slideshow presets, see [Modifying Slideshow Presets](#) on page 462.

- Create a new slideshow preset.

For more information about creating new slideshow presets, see [Creating Slideshow Presets](#) on page 461.

- 5 In the Slideshow dialog, select the "Play music during slideshow" checkbox.



- 6 Navigate to a song or an audio track in the audio browser.

You can search for a specific song, artist, or song time by entering information in the search field.

- 7 If you want to preview your song choice, click the Play button.

- 8 If you are satisfied with your music selection, click OK.

The Play Slideshow dialog appears.

- 9 Click Start to begin playing the slideshow presentation.

Workflow for Creating a Multimedia Slideshow Presentation

Creating, editing, and sharing slideshows containing your photos is a fairly simple process. Here are some of the typical steps in the slideshow creation and sharing process.

Stage 1: Selecting Photos, Audio Clips, and Video Clips

Gather your initial selection of photos and video clips in the Browser. Locate any audio clips you plan to use in your slideshow presentation.

Stage 2: Creating a Slideshow Album

Create a slideshow album in the Library inspector from the selection of photos and video clips in the Browser and choose a theme for the slideshow. Drag additional photos and video clips into the slideshow album as necessary.

Note: The Classic and Ken Burns slideshow themes are the most customizable. Use the dialog that appears when you create a new slideshow album to preview the slideshow themes that come with Aperture. If you want to significantly modify a slideshow theme, choose Classic or Ken Burns.

Stage 3: Arranging the Slideshow Presentation

Arrange the photos and video clips in the Browser, below the Slideshow Editor, from left to right to tell the story you want. Each photo and video clip functions as an individual slide.

Stage 4: Previewing the Slideshow in the Slideshow Editor

Preview the slideshow in the Slideshow Editor to verify that photos and video clips play in the correct sequence.

Stage 5: Selecting Music

Choose the music or audio clip that will play during the slideshow. You can apply a looped song to the main audio track and then add voiceover audio clips and other audio clips to the secondary audio track.

Stage 6: Adjusting Transitions

Adjust transitions to emphasize the most important photos in the slideshow or give a particular treatment to photos with similar subject matter. Make sure that the sequence of photos and the duration of the transitions match the cadence and tempo of the music or audio clip you selected for the slideshow.

Stage 7: Titling and Adding Text to the Slideshow

Add a title to your slideshow using the titling controls. Insert a blank slide at the beginning of the movie to display your title. You can also use blank slides to act as chapter dividers. Add text to individual slides where appropriate.

Stage 8: Previewing the Slideshow Again

Preview the slideshow once again in full-screen mode to make sure the photos and video clips are playing in the correct sequence. Ensure that the music or audio clip matches the theme of the slideshow and the cadence of the photos and video clips, that the effects and transitions are to your liking, and that the title text is correct.

Stage 9: Exporting the Slideshow

Export the slideshow as a movie in the format that best fits the platform by which you mean to share it. You can choose a format that is optimized for iPhone, iPod, iPod touch, iPad, YouTube, Apple TV, 720p HD, or 1080p HD. You can also create a custom movie in a wide range of frame rates and frame sizes.

Stage 10: Sharing Your Slideshow

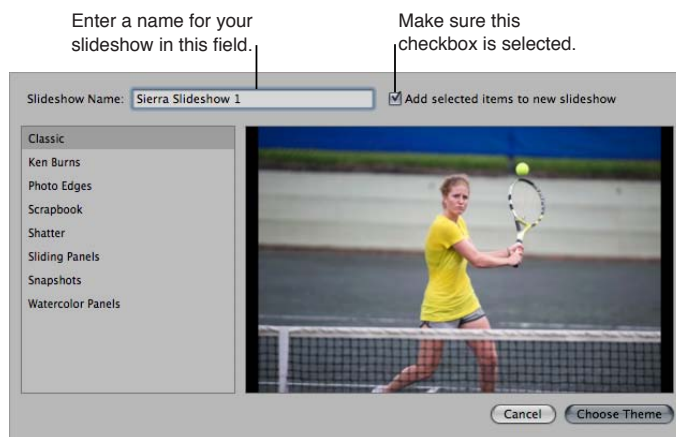
After exporting your slideshow movie, tell your clients and friends. If you've posted your slideshow on your website or YouTube, send an email announcement.

Creating Slideshow Albums

To create a slideshow using the Slideshow Editor, you must first create an album that holds the slideshow's photos. The easiest way to do this is to select photos you want to appear in the slideshow and then create an album. Aperture places the photos in the order in which they were selected in the Browser, but you can rearrange the order at any time.

To create a slideshow album from selected photos

- 1 Do one of the following:
 - In the Browser, select the photos you want to place in your slideshow.
 - Select an item in the Library inspector.
- 2 Do one of the following:
 - Choose File > New > Slideshow.
 - Control-click an item in the Library inspector, then choose New > Slideshow from the shortcut menu.
 - Choose Slideshow from the New pop-up menu in the toolbar.
- 3 In the dialog that appears, give the slideshow a name, select a theme, and make sure the "Add selected items to new slideshow" checkbox is selected.

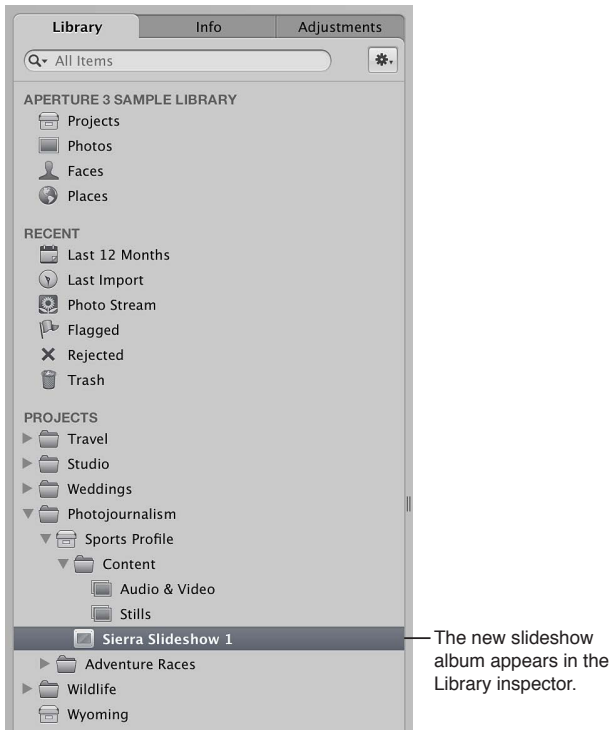


You can preview slideshow themes by selecting themes in the left column.

Note: Aperture slideshow themes automatically scale to fit panoramic photos.

- 4 Click Choose Theme.

The new slideshow album containing the selected photos appears in the Library inspector, and the Slideshow Editor appears above the Browser. If you want to rename the slideshow album, double-click the slideshow album's name in the Library inspector and enter a new name.



To create a new, empty slideshow album

- 1 Do one of the following:
 - Choose File > New > Slideshow.
 - Control-click an item in the Library inspector, then choose New > Slideshow from the shortcut menu.
 - Choose Slideshow from the New pop-up menu in the toolbar.
- 2 In the dialog that appears, give the slideshow a name, then select a theme.

You can preview slideshow themes by selecting themes in the left column.

Note: Aperture slideshow themes automatically scale to fit panoramic photos.
- 3 Make sure the “Add selected items to new slideshow” checkbox is not selected.
- 4 Click Choose Theme.

The new, empty slideshow album appears in the Library inspector, and the Slideshow Editor appears above the Browser. Drag the photos you want from the Browser into the new slideshow album in the Library inspector.

To make changes to the slideshow, you use the controls in the Slideshow Editor. For more information about making changes to the slideshow, see [About Editing Slideshow Transitions and Applying Effects](#) on page 468.

Changing a Slideshow's Theme

The first step in creating a slideshow is to choose its theme. Aperture provides a set of professionally designed themes that present your photos with background images, graphic elements, and animation.

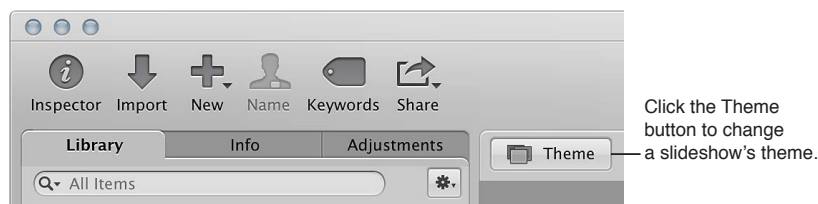
Aperture asks you to choose a theme when you first create a slideshow album, and it's a good idea to explore the slideshow themes before you get started. Some themes may lend themselves better to the subject matter of your photos than others. However, you can change the theme of a slideshow at any time.

Note: Additional slideshow themes appear in the Slideshow Themes dialog for use in Aperture when iPhoto '11 is installed. Aperture slideshow themes automatically scale to fit panoramic photos.

For more information about creating slideshow albums, see [Creating Slideshow Albums](#) on page 465.

To change the theme for a slideshow

- 1 In the Slideshow Editor, click the Theme button.



- 2 In the dialog that appears, select a theme from the list, then click Choose Theme.

Aperture applies the selected theme to the slideshow.

Important: Aperture provides a set of professionally designed themes you can use to present slideshows of your photos. However, the Classic and Ken Burns slideshow themes are the most customizable. Use the dialog that appears when you create a new slideshow album or when you click the Theme button in the Slideshow Editor to preview the slideshow themes that come with Aperture. If you want to significantly modify a slideshow theme, choose Classic or Ken Burns.

About Editing Slideshow Transitions and Applying Effects

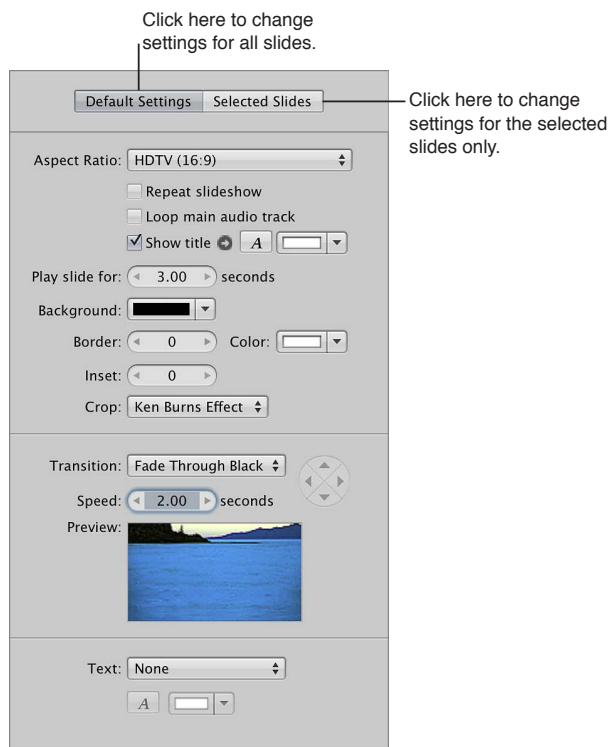
Aperture provides two methods for applying transitions and effects to the slides in your slideshow. The first method applies the changes uniformly to every slide and transition in the slideshow using the Default Settings controls. The second method applies changes to individual slides and transitions using the Selected Slides controls. You use the second method when you want to emphasize a specific photo, change the length or type of a particular transition, or apply text to an individual slide. The settings made for selected photos using the Selected Slides controls override the settings made to the entire slideshow using the Default Settings controls. When you make changes to the entire slideshow using the Default Settings controls, the settings made using the Selected Slides controls are unchanged.

Although the Default Settings and Selected Slides controls are not visible by default, you can access them by clicking the Slideshow Settings button in the Slideshow Editor.

For more information about working with the Default Settings controls, see [An Overview of Modifying the Entire Slideshow](#) on page 469. For more information about working with the Selected Slides controls, see [An Overview of Modifying Individual Slides and Transitions](#) on page 475.

To show the Default Settings and Selected Slides controls

- Click the Slideshow Settings button (with a slide icon) in the lower-right corner of the Slideshow Editor, then click either the Default Settings or Selected Slides button.



The slideshow controls in either the Default Settings or Selected Slides pane appear, depending on which button you clicked.

Modifying Settings Applied to the Entire Slideshow

An Overview of Modifying the Entire Slideshow

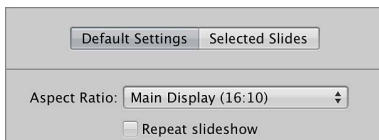
The onscreen duration of each slide, the type of transition between slides, and the length of the transitions are initially set by the theme you choose for the slideshow. However, you can change these settings at any time, along with the aspect ratio, background color, image borders, Ken Burns effect settings, and titles. For more information about working with slideshow themes, see [Changing a Slideshow's Theme](#) on page 467.

Setting the Aspect Ratio for the Slideshow

Determining the aspect ratio of the slideshow is the first setting you need to address. Aperture slideshows can be output at aspect ratios that match either the main or secondary display, the dimensions of a standard 4:3 or 16:9 widescreen TV, or the 3:2 aspect ratio of iPhone.

To set the aspect ratio for the slideshow

- If the Default Settings pane of the Slideshow Editor is not shown, click the Default Settings button, then choose an aspect ratio from the Aspect Ratio pop-up menu.



Looping the Slideshow and the Main Audio Track

You can set the slideshow to play repeatedly in full-screen mode until you stop playback by pressing Esc. You can set playback of the audio clip in the slideshow's main audio track to loop until the end of the slideshow.



To set the slideshow to loop in full-screen mode until stopped

- In the Default Settings pane of the Slideshow Editor, select the "Repeat slideshow" checkbox.

To loop playback of the slideshow's main audio track

- In the Default Settings pane of the Slideshow Editor, select the "Loop main audio track" checkbox.

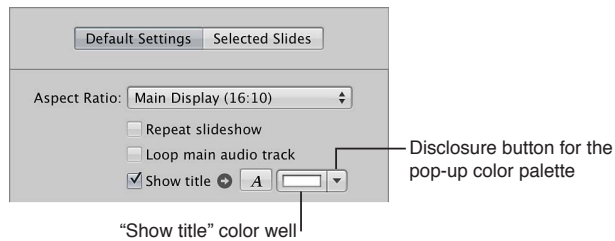
Applying a Title to the Slideshow

You can apply a title to the beginning of your slideshow. You can also display your title over a solid background by inserting a blank slide.

Note: The title controls in the Selected Slides pane of the Slideshow Editor and the title options in the Slideshow Action pop-up menu (with a gear icon) are available for use only with the Classic and Ken Burns slideshow themes. If iPhoto '11 is installed, a new Text control appears, allowing you to add text to any slideshow theme.

To apply a title to the beginning of the slideshow

- 1 In the Default Settings pane of the Slideshow Editor, select the “Show title” checkbox.



The slideshow album's name appears in a text box over the first slide in the slideshow.

- 2 If you wish, double-click the title and enter new title text.
- 3 If you would like to choose a specific font and font size for the slideshow text, click the “Show” Fonts button and select a font and font size from the Fonts window.
- 4 If you would like to change the font color for the slideshow title, do one of the following:
 - Click the “Show title” color well, then select a color from the Colors window.
 - Click the disclosure button to the right of the color well, then select a color from the pop-up color palette.

To insert a blank slide for the title

- 1 In the Browser, move the playhead to the beginning of the slideshow.
- 2 Choose Insert Blank Slide With Text from the Slideshow Action pop-up menu (with a gear icon).
- 3 If necessary, drag the blank slide to the beginning of the slideshow.

A blank slide appears at the beginning of the slideshow with the title.

- 4 In the Slideshow Editor, double-click the text in the slide and enter a title for the slideshow.

Setting the Length of Time Slides Play

Next, you need to set the length of time the slides play.

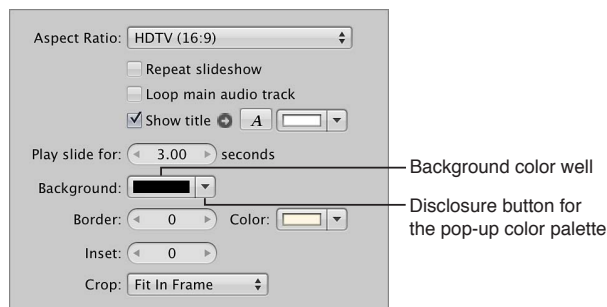
To set the length of time the slides play

- In the Default Settings pane of the Slideshow Editor, specify the number of seconds that each slide should appear onscreen using the “Play slide for” value slider.

Note: Depending on which theme is applied to the slideshow, additional controls may appear for fitting the slideshow to the soundtrack and aligning the slideshow to beats. For more information about adding a soundtrack to a slideshow, see [An Overview of Adding Music and Audio to Slideshows](#) on page 483.

Choosing a Background Color for the Slideshow

You can change the color of the background over which the slides play.



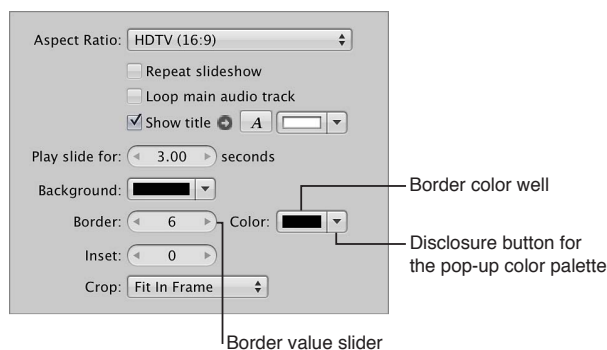
To change the slideshow's background color

Do one of the following:

- Click the disclosure button to the right of the color well, then select a color from the pop-up color palette.
- In the Default Settings pane of the Slideshow Editor, click the Background color well, then select a color from the Colors window.

Adding Borders Uniformly to Slides

You can add a uniform border to the slides in your slideshow to help distinguish them from the background.



To add image borders

- 1 In the Default Settings pane of the Slideshow Editor, specify the width of the border using the Border value slider.
- 2 To specify a border color, do one of the following:
 - Click the Border color well, then select a color from the Colors window.
 - Click the disclosure button to the right of the color well, then select a color from the pop-up color palette.

The border is applied to every photo in the slideshow.

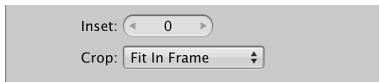
To add space between a photo and its border

- In the Default Settings pane of the Slideshow Editor, specify the width of the inset (as measured in pixels) using the Inset value slider.

Fitting the Slides to the Aspect Ratio

After you have chosen an aspect ratio for your slideshow, you need to decide how you want your photos to appear within the aspect ratio. Use the Crop pop-up menu in the Default Settings pane of the Slideshow Editor to choose to have the photos fit within the frame of the slideshow aspect ratio, have the photos fill the frame of the slideshow aspect ratio, or apply a Ken Burns effect to each photo in the slideshow. A Ken Burns effect either zooms in to or out of the photo while simultaneously panning along the widest dimension of the photo.

You can have Aperture scale the photos so that they fill the screen, with no part of the background showing. Keep in mind that Aperture must zoom in to most of the photos to make them fit the aspect ratio of the slideshow. This means that parts of the photos will be cropped.



To set the crop characteristics for your photos

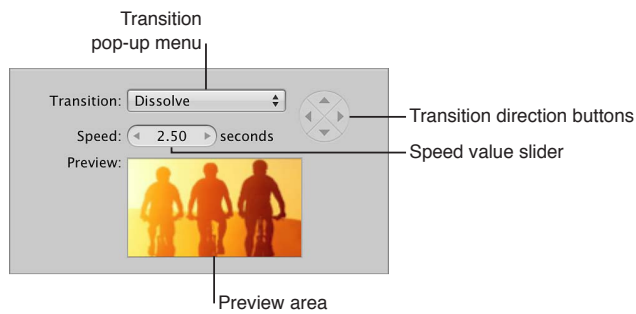
- *To fit every photo in the slideshow within the chosen aspect ratio without cropping the photos:* Choose Fit in Frame from the Crop pop-up menu.
- *To have every photo in the slideshow fill the frame of the chosen aspect ratio:* Choose Fill Frame from the Crop pop-up menu.

Cropping will occur along the longest dimension of each photo unless the photo's aspect ratio matches the aspect ratio chosen in the Aspect Ratio pop-up menu. Drag within the images to set the portions of the photos that are visible.

- *To apply a Ken Burns effect to the photos in the slideshow:* Choose Ken Burns Effect from the Crop pop-up menu.

Adding Transitions Uniformly Between Slides

You can add uniform transitions between the slides in your slideshow as well as set the duration of the transitions.



To apply a transition uniformly between slides in the slideshow

- 1 In the Default Settings pane of the Slideshow Editor, choose a transition from the Transition pop-up menu.

A preview of the selected transition plays below the Speed value slider. You can use the Transition direction buttons to preview the angle at which animated transitions enter and exit the frame.

- 2 If you chose a transition that can be applied in more than one direction, click a Transition direction button to set the direction of the transition.

The Preview area shows the angle at which animated transitions enter and exit the frame.

Note: The Transition direction buttons appear dimmed if you choose a transition that can be applied in only one direction.

- 3 Set the duration of the transitions between slides by specifying the time, in seconds, using the Speed value slider.

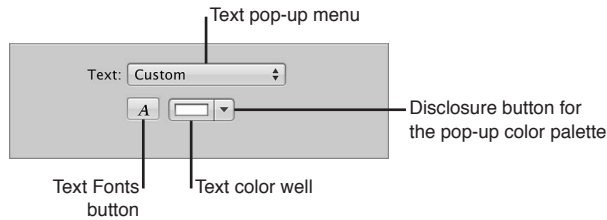
The chosen transition is applied uniformly between slides in the slideshow, with the direction and duration you specified.

Adding Text to Slides

You can display basic information about each photo in your slideshow, such as each version's name or caption.

To add slide text

- 1 In the Default Settings pane of the Slideshow Editor, choose the type of information to display with each photo from the Text pop-up menu.



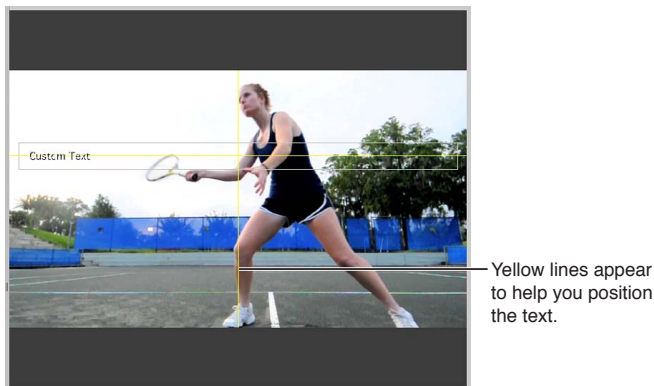
- 2 If you would like to choose a specific font and font size for the slideshow text, click the Text Fonts button and select a font and font size from the Fonts window.
- 3 If you would like to change the color of the slideshow text, do one of the following:
 - Click the Text color well, then select a color from the Colors window.
 - Click the disclosure button to the right of the color well, then select a color from the pop-up color palette.

To move the slide text

By default, the slide text is displayed on the lower-left side of the photo. However, you can choose where you want the slide text to appear onscreen.

- In the Slideshow Editor, select the slide text, then drag it to a new position on the screen.

Yellow alignment guides appear to help you center the text horizontally and vertically or align the text in the upper third or lower third of the photo.



The slide text is moved to the new position, appearing in the same position over each slide.

Modifying Individual Slides and Transitions

An Overview of Modifying Individual Slides and Transitions

After specifying the basic settings for a slideshow, you use the Selected Slides controls to modify or accentuate specific slides and transitions. You can set the length of time a specific photo appears onscreen, change the background color for any slide, modify the border width and color for individual slides, modify the space between a photo and its border, and set how a specific photo is cropped when it is set to fill the screen. You can also apply a Ken Burns effect to a specific slide and set where the panning begins and ends within the photo, apply or change an existing transition and its duration, and apply titles to individual slides.

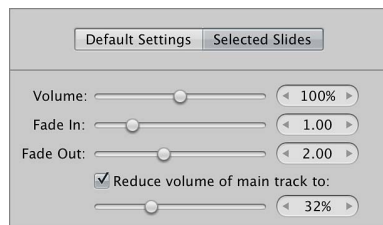
Note: The availability of controls in the Selected Slides pane of the Slideshow Editor depends on the theme applied to the slideshow.

For more information about working with the default settings for a slideshow, see [An Overview of Modifying the Entire Slideshow](#) on page 469.

Working with Video Slides

In Aperture, you can add video clips as individual slides in your slideshow. You work with video clips in the Slideshow Editor and Browser in the same way that you work with photos. However, there are additional controls in the Selected Slides pane of the Slideshow Editor for specifying the volume settings of the video clip. For example, you can mute the audio clip in the main audio track so that it doesn't drown out the audio in the video clip while it is playing in the slideshow. You can also set duration of the fade-in and fade-out of the video clip's audio to smooth out abrupt transitions between the video clip and the audio clip in the slideshow's main audio track.

Note: To trim a video clip or duplicate a video clip so that you can use multiple portions of it in the same slideshow, see [Working with Audio and Video in the Viewer](#) on page 112.



To set the volume for a video slide

- 1 Select a video clip in the Browser.
- 2 If the Selected Slides pane of the Slideshow Editor is not shown, click the Selected Slides button.

Note: The video controls appear in the Selected Slides pane only when a video clip is selected in the Browser.

- 3 Specify the volume of the video clip as it plays in the slideshow using the Volume slider and value slider.

To add a fade-in to a video clip

You can set the volume of a video clip to smoothly increase over time by applying a fade-in. Adding a fade-in to a video clip helps prevent an abrupt transition from the audio clip in the slideshow's main audio track to the audio in the video clip.

- In the Selected Slides pane of the Slideshow Editor, specify the duration of the fade-in, in seconds, using the Fade In slider and value slider.

To add a fade-out to a video clip

You can set the volume of a video clip to smoothly decrease over time by applying a fade-out. Adding a fade-out to a video clip helps prevent an abrupt transition from the audio in the video clip to the audio clip in the slideshow's main audio track.

- In the Selected Slides pane of the Slideshow Editor, specify the duration of the fade-out, in seconds, using the Fade Out slider and value slider.

To adjust the volume of the audio clip in the main audio track while a video clip is playing

You can specify the volume of the audio clip in the main audio track or turn it off completely when a video clip is playing.

- In the Selected Slides pane of the Slideshow Editor, make sure the "Reduce volume of main track to" checkbox is selected, then drag the slider to the left to decrease the volume, or to the right to increase it. You can also click the left or right arrow in the value slider to change the volume, or drag in the value field.

To mute the volume of the audio clip in the main audio track while a video clip is playing

- In the Selected Slides pane of the Slideshow Editor, make sure the "Reduce volume of main track to" checkbox is selected, then set the slider to 0%.

Applying a Photo Effect to Individual Slides

You can apply an effect, such as a sepia tint, to a selection of slides in your slideshow.

To apply a photo effect to a specific slide or group of slides

- 1 Select a photo or group of photos in the Browser.
- 2 If the Selected Slides pane is not shown in the Slideshow Editor, click the Selected Slides button, then choose an effect from the "Photo effect" pop-up menu.



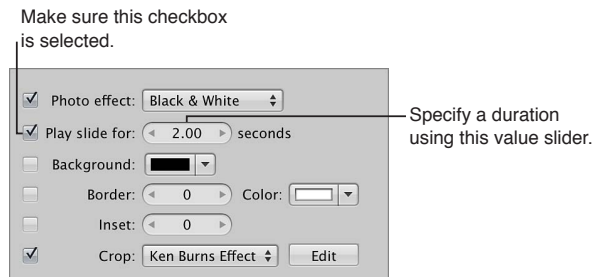
The effect is applied to the selected slides. Deselect the "Photo effect" checkbox to turn the effect off.

Modifying the Display Time for Individual Slides

You can modify the length of time any photo in your slideshow appears onscreen.

To set the display time for a specific slide or group of slides

- 1 Select a photo or group of photos in the Browser.
- 2 In the Selected Slides pane of the Slideshow Editor, select the “Play slide for” checkbox.



- 3 Specify the length of time you want the slide or group of slides to appear using the “Play slide for” value slider.

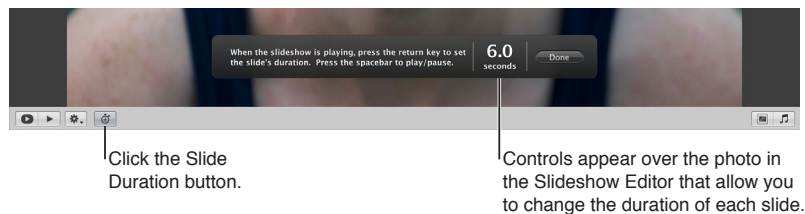
The display time for the selected slide or slides changes to the duration you specified.

To set a slide’s duration on the fly

You can use the Slide Duration button to change the durations of slides while the slideshow is playing. When you click the Slide Duration button, controls appear that allow you to set the length of time each slide plays on the fly while playing the slideshow.

- 1 In the Browser, move the playhead to the beginning of the slideshow.
- 2 In the Slideshow Editor, click the Slide Duration button.

An overlay displays the length of time the slide is set to play.



- 3 Press the Space bar to play the slideshow.

As the playhead moves over the selected slide in the Browser, the duration counter in the overlay counts the number of seconds. The playhead stops when it reaches the end of the slide, but the duration counter continues to count.

- 4 Press Return to stop the counter and set the current slide’s display duration.

The playhead moves to the next slide in the Browser.

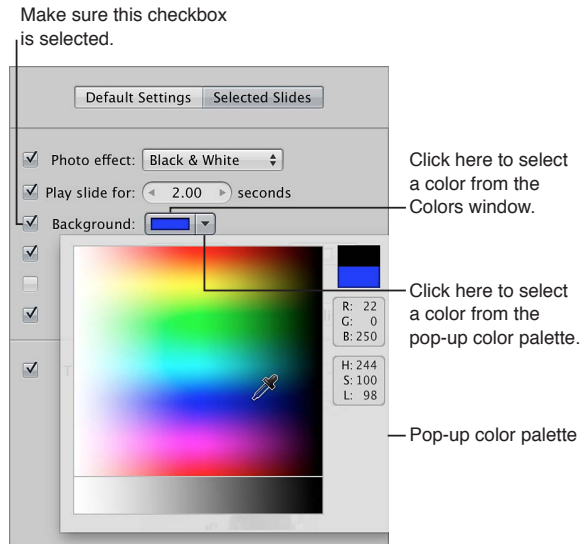
- 5 Repeat step 4 until the duration of each slide is set.
- 6 When you have finished, click Done.

Changing the Background Color for Individual Slides

You can change the background color for any slide in your slideshow.

To change the background color of a specific slide or group of slides

- 1 Select a photo or group of photos in the Browser.
- 2 In the Selected Slides pane of the Slideshow Editor, select the Background checkbox.



- 3 Do one of the following:
 - Click the Background color well, then select a color from the Colors window.
 - Click the disclosure button to the right of the color well, then choose a color from the pop-up color palette.

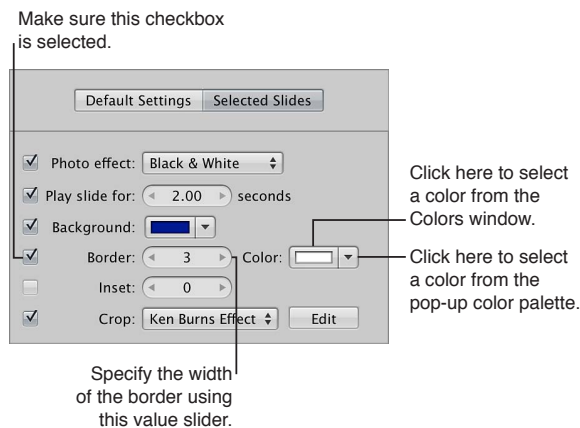
The new background color is applied to the selected slide or group of slides.

Adding Image Borders to Individual Slides

You can apply a border to any photo or group of photos in a slideshow.

To add image borders to a selected slide or group of slides

- 1 Select a photo or group of photos in the Browser.
- 2 In the Selected Slides pane of the Slideshow Editor, select the Border checkbox.



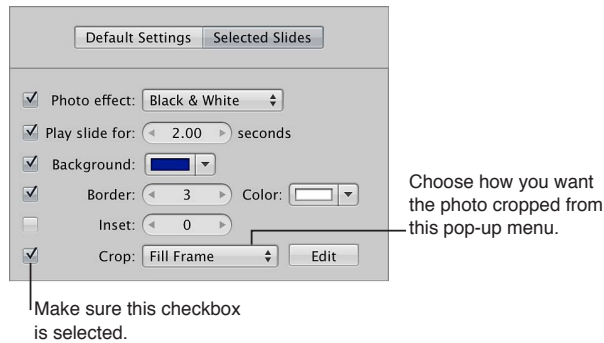
- 3 Specify the width of the border using the Border value slider.

- 4 If you want to change the color of the border, do one of the following:
- Click the Border color well, then select a color from the Colors window.
 - Click the disclosure button to the right of the color well, then select a color from the pop-up color palette.

The new image border is applied to the selected slide or group of slides in the slideshow.

Setting the Crop for Individual Slides

You can make a photo or a group of photos in your slideshow fill the screen.



To make the photo or group of photos in the slideshow fill the screen

- 1 Select a photo or group of photos in the Browser.
- 2 In the Selected Slides pane of the Slideshow Editor, select the Crop checkbox.
- 3 Choose Fill Frame from the Crop pop-up menu.

The selected photo or photos fill the screen. To set which part of the photo is cropped when you choose the Fill Frame item from the Crop pop-up menu, follow the steps below.

To set the crop for photos that fill the screen

- 1 In the Selected Slides pane of the Slideshow Editor, click the Edit button to the right of the Crop pop-up menu.

A crop overlay appears over the selected photo.
- 2 Drag the crop overlay over the part of the photo that you want to appear in the slideshow.
- 3 Click Done.

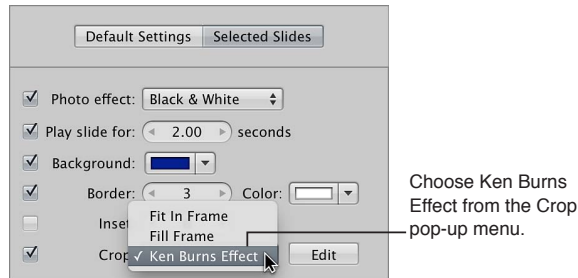
Applying a Ken Burns Effect to Individual Slides

You can select specific photos in your slideshow that warrant additional emphasis and apply a Ken Burns effect to them. You can also choose where the Ken Burns effect panning begins and ends within a photo.

Note: If the faces in the photos have names assigned to them, the Ken Burns effect takes this information into account when cropping and positioning the faces in the slideshow.

To apply a Ken Burns effect to an individual slide in the slideshow

- 1 Select a photo in the Browser.
- 2 In the Selected Slides pane of the Slideshow Editor, select the Crop checkbox.



- 3 Choose Ken Burns Effect from the Crop pop-up menu.

A Ken Burns effect is applied to the photo.

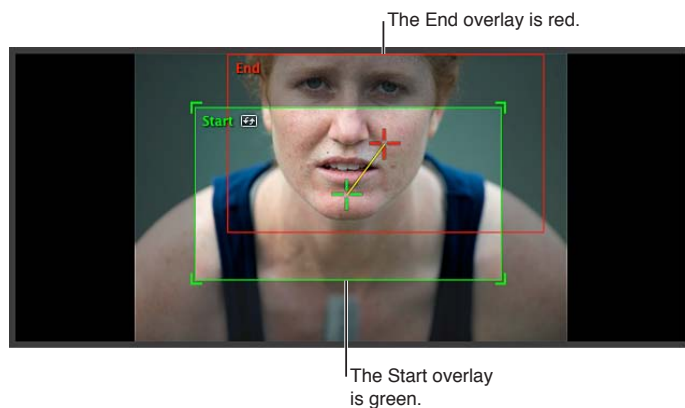
To set the start and end frames for the Ken Burns effect

- 1 Follow the steps above for applying a Ken Burns effect to an individual slide.
- 2 Click the Edit button to the right of the Crop pop-up menu.

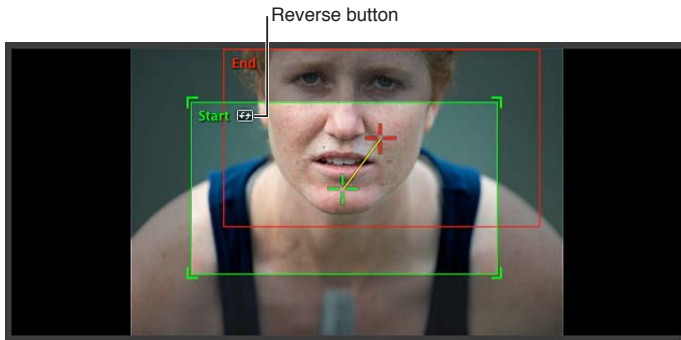
The Start and End overlays appear in the Slideshow Editor.

- 3 Drag the Start (green) and End (red) overlays over the parts of the photo where you want the panning to begin and end.

The yellow line between the center marks of the Start and End overlays indicates the panning path of the Ken Burns effect.



- 4 If you wish, you can reverse the panning motion by clicking the Reverse button.



- 5 When you are satisfied with the panning path of the Ken Burns effect, click Done.

The customized Ken Burns effect is applied to the photo.

Tip: Click the Preview Slideshow button or press the Space bar to review the customized Ken Burns effect you applied to the photo.

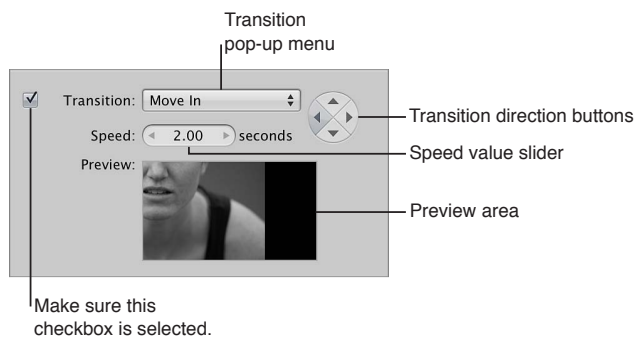
Modifying Individual Transitions Between Slides

You can add a unique transition in your slideshow or change an existing one using the Transition controls.

To add a unique transition between slides

- 1 Select two photos in the Browser that appear side by side.
- 2 In the Selected Slides pane of the Slideshow Editor, select the Transition checkbox and choose a transition from the pop-up menu.

A preview of the transition applied between the photos appears in the Preview area below the Speed value slider.



- 3 Set the duration of the transition in seconds using the Speed value slider.
- 4 If the transition effect can be applied in more than one direction (the Move In transition, for example), you can set the direction of the transition by clicking one of the Transition direction buttons.

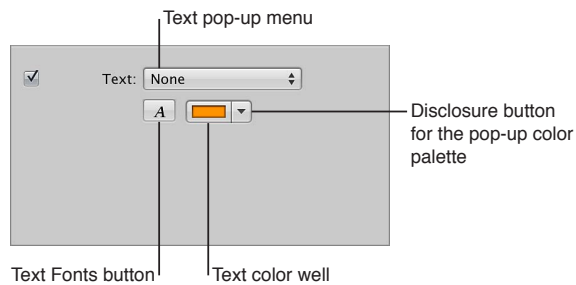
The chosen transition is applied between the photos selected in the Browser with the duration and direction you specified.

Adding Text to an Individual Slide

You can add text to individual photos in your slideshow using the Text controls. The text for the individual slides overrides any text applied to the entire slideshow using the Default Settings controls. Text that can be edited appears over the selected photo or group of photos in the slideshow. You can also automatically add text based on metadata such as the version name or caption.

To add text to an individual photo in the slideshow

- 1 In the Browser, select a photo or group of photos.
- 2 In the Selected Slides pane of the Slideshow Editor, select the Text checkbox, then do one of the following:
 - *To add custom text:* Choose Custom from the Text pop-up menu.
Text that can be edited appears over the selected photo in the slideshow. Enter the text for the photo here.
 - *To add text based on the photo's metadata:* Choose a type of metadata from the Text pop-up menu.



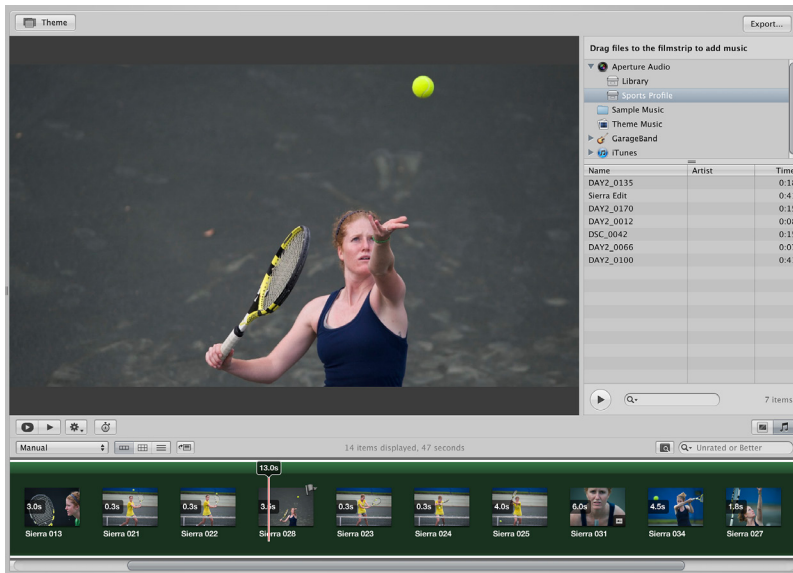
- 3 If you would like to change the color of the text, do one of the following:
 - Click the Text color well, then select a color from the Colors window.
 - Click the disclosure button to the right of the color well, then select a color from the pop-up color palette.
- 4 If you would like to choose a specific font and font size for the slideshow text, click the Text Fonts button and select a font and font size from the Fonts window.
- 5 If you would like to choose where the text appears on the screen, drag the text to a new position.

Adding Music and Audio to Slideshows

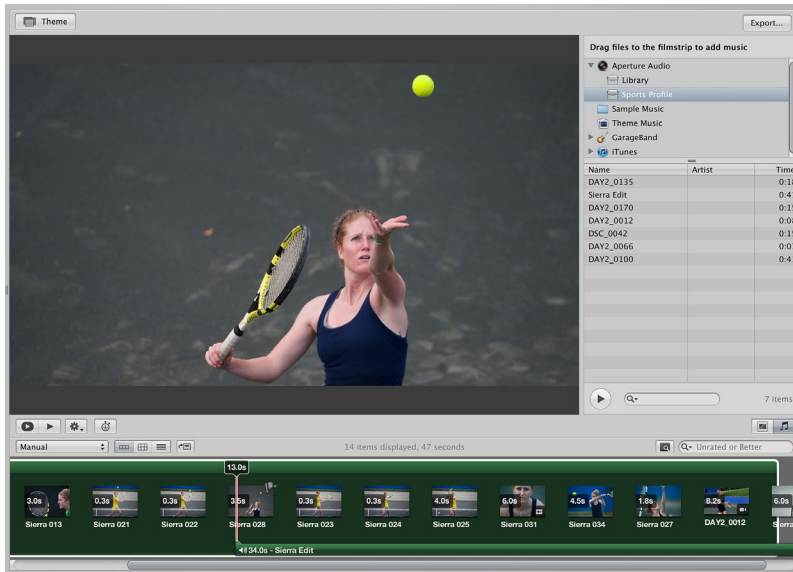
An Overview of Adding Music and Audio to Slideshows

You can add music and audio to your slideshow using the Audio browser controls in the Slideshow Editor. In the Slideshow Editor, you can add audio to slideshows in two ways.

The first method of adding audio to a slideshow involves dragging a song or an audio clip from the Audio browser to the background of the timeline in the Browser. Audio added in this way is called the *main audio track*. The main audio track is used to play audio, such as a song, in the background. Clips in the main audio track cannot be edited, but you can append additional audio (such as another song) to the end of the track if the slideshow is longer than the audio file. When an audio clip is added to the main audio track, the background of the timeline in the Browser appears green.



The second method of adding audio to a slideshow involves dragging a song or an audio clip, such as voiceover recorded using GarageBand, from the Audio browser to a specific slide in the Browser. Dragging an audio clip to a slide creates a *secondary audio track*, which appears as a green bar below the slides in the Browser. You can trim the length of audio clips in the secondary audio track, as well as control fade-in and fade-out effects.



You can use the Audio browser controls to access DRM-free audio files from a variety of sources, including the Sample Music folder, the Theme Music folder, GarageBand, or your iTunes music library. You can also use any audio file imported into the Aperture library.

You can fit the slideshow to match the length of the main audio track, and you can align the slides to match the beat of the music.

To show the Audio browser controls

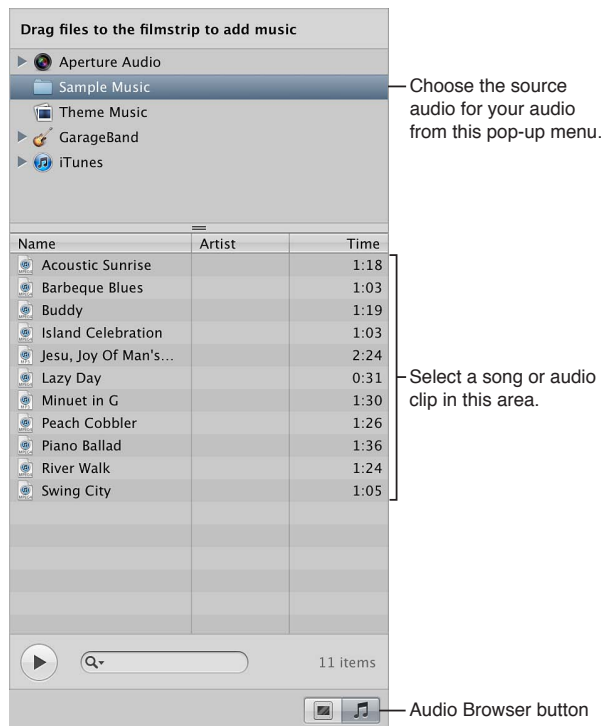
- Click the Audio Browser button (with an icon of a musical note) in the lower-right corner of the Slideshow Editor.

Adding Audio Clips to Your Slideshow

You can add audio to your slideshow by dragging an audio clip to the background of the Browser to create the main audio track, or you can drag an audio clip to a specific slide in the Browser to create the secondary audio track.

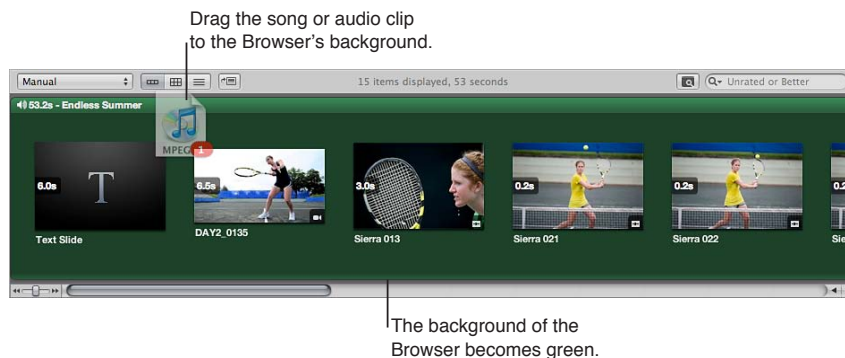
To add an audio clip to the main audio track in your slideshow

- 1 If the Audio browser controls are not shown in the Slideshow Editor, click the Audio Browser button.
- 2 Choose the source for your audio from the Source list pop-up menu.



- 3 Select a song or audio clip from the Audio browser.
- 4 If you wish, preview the audio by clicking the Play button.
- 5 Drag the selected song or audio clip to the Browser's background.

The background of the Browser appears green, indicating that the selected song or audio clip is applied to the main audio track of the slideshow. The main audio track clip always starts at the beginning of the slideshow. When there is more than one clip in the main audio track, the audio clips are placed back to back, with no gaps.

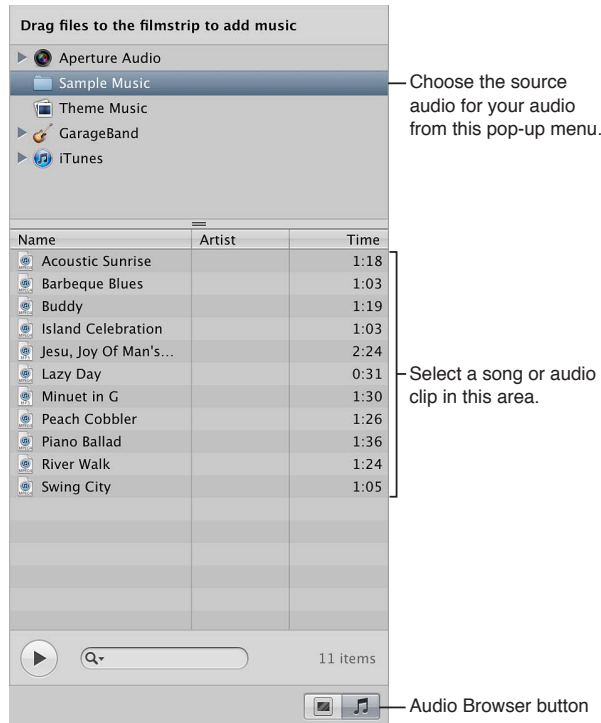


- 6 If the audio clip in the main audio track is not long enough, drag another audio clip from the Audio browser to the point in the Browser where the previous audio clip ended.

The main audio track is extended by the duration of the second audio clip.

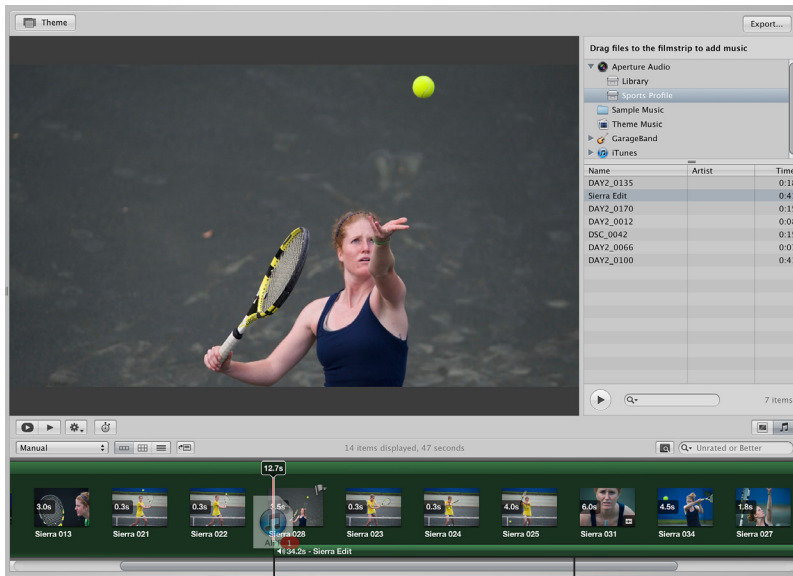
To add an audio clip to the secondary audio track in your slideshow

- 1 If the Audio browser controls are not shown in the Slideshow Editor, click the Audio Browser button.
- 2 Choose the source for your audio from the Source list pop-up menu.



- 3 Select a song or audio clip from the Audio browser.
- 4 If you wish, preview the audio by clicking the Play button.
- 5 Drag the selected song or audio clip to the specific slide in the Browser where you want the audio to begin.

A green bar appears at the bottom of the Browser to indicate that the audio clip has been added to the secondary audio track. When the playhead reaches the secondary audio track, the audio clip in that track plays over any audio clip in the main audio track.



Drag the song or audio clip to where you want the secondary audio to begin.

The green bar indicates a clip in the secondary audio track.

- Repeat steps 2 through 5 to add additional audio clips to the secondary audio track.

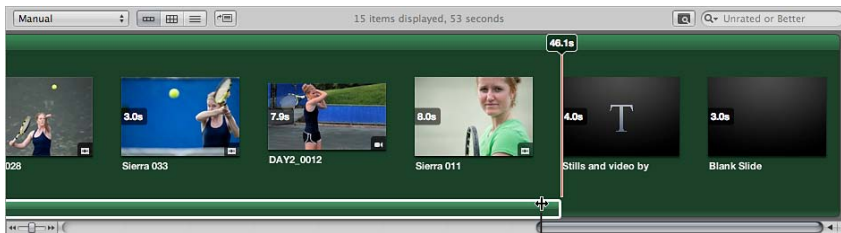
Working with Audio Clips in the Secondary Audio Track

You can adjust the duration and placement of audio clips in the secondary audio track.

To trim an audio clip in the secondary audio track

- In the Browser, click the right edge of the audio clip, then drag to the left to shorten the audio clip or drag to the right to lengthen it.

The pointer changes to a Resize pointer, indicating that you can change the clip duration.

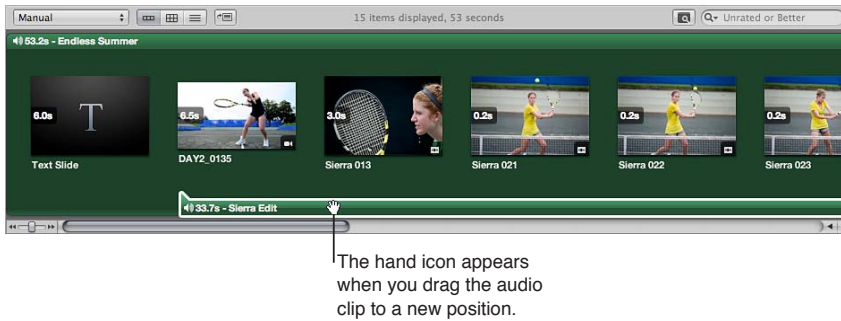


Use the Resize pointer to shorten or lengthen the audio clip.

To adjust the placement of an audio clip in the secondary audio track

- Drag the audio clip to a new position in the Browser timeline.

The pointer changes to a hand, indicating that you can drag the audio clip to a new position.



Adjusting the Volume Between the Main Audio Track and Secondary Audio Track

As the slideshow plays, the clips in the secondary audio track always play on top of audio clips in the main audio track. However, you can apply fade-ins and fade-outs to the clips in the secondary audio track, and you can adjust the volume of clips in the main audio track when a clip in the secondary audio track is playing.

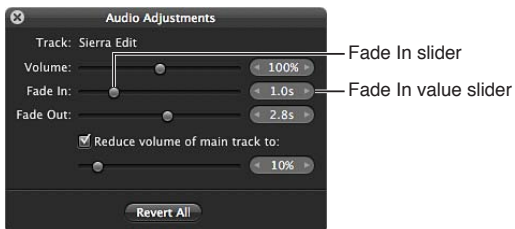
To add a fade-in to an audio clip in the secondary audio track

- 1 In the Browser, select the clip in the secondary audio track to which you want to apply a fade-in.
- 2 Do one of the following:
 - Choose Adjust Audio from the Slideshow Action pop-up menu (with a gear icon).
 - In the Browser, double-click the audio clip.

The Audio Adjustments HUD appears.

- 3 In the Audio Adjustments HUD, drag the Fade In slider to the right to increase the duration of the fade-in, or to the left to decrease the duration.

You can also click the left or right arrow in the Fade In value slider, or drag in the value field.



A setting of 0.0s turns the fade-in off.

The volume at the beginning of the audio clip in the secondary audio track will slowly increase according to the setting you specified in the Audio Adjustments HUD.

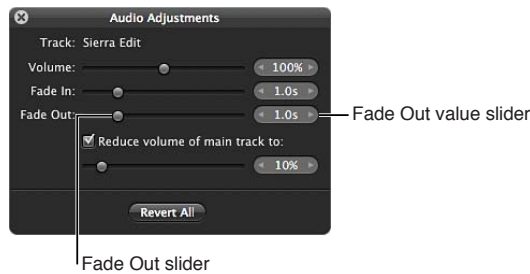
To add a fade-out to an audio clip in the secondary audio track

- 1 In the Browser, select the clip in the secondary audio track to which you want to apply a fade-out.
- 2 Do one of the following:
 - Choose Adjust Audio from the Slideshow Action pop-up menu (with a gear icon).
 - In the Browser, double-click the audio clip.

The Audio Adjustments HUD appears.

- 3 In the Audio Adjustments HUD, drag the Fade Out slider to the right to increase the duration of the fade-out, or to the left to decrease the duration.

You can also click the left or right arrow in the Fade Out value slider, or drag in the value field.



A setting of 0.0s turns the fade-out off.

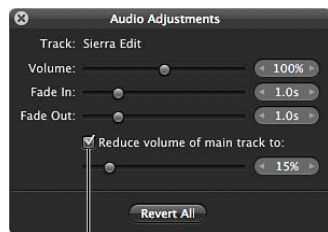
The volume at the end of the audio clip in the secondary audio track will slowly decrease according to the setting you specified in the Audio Adjustments HUD.

To adjust the volume of clips in the main audio track while a clip in the secondary audio track is playing

- 1 In the Browser, select a clip in the secondary audio track.
- 2 Do one of the following:
 - Choose Adjust Audio from the Slideshow Action pop-up menu (with a gear icon).
 - In the Browser, double-click the audio clip.

The Audio Adjustments HUD appears.

- 3 In the Audio Adjustments HUD, do one of the following:
 - *To change the volume of clips in the main audio track:* Make sure the “Reduce volume of main track to” checkbox is selected, then drag the slider to the left to decrease the volume, or to the right to increase it. You can also click the left or right arrow in the value slider to change the volume, or drag in the value field.
 - *To mute the main audio track:* Make sure the “Reduce volume of main track to” checkbox is selected, then set the slider to 0%.



Use this checkbox and the controls below to change or mute the volume of clips in the main audio track.

Syncing the Main Audio Track to the Slides in the Slideshow

You can set the slideshow to fit the duration of the main audio track. However, you need to make sure that the audio clips you apply to the main audio track are long enough to play each slide.

To fit the slideshow to the duration of the main audio track

- In the Slideshow Editor, choose Fit Slides to Main Audio Track from the Slideshow Action pop-up menu (with a gear icon).

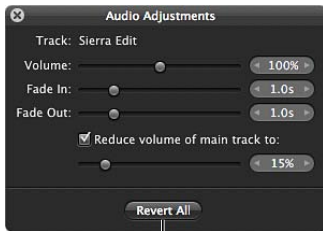
To align the slides to the beat of the music

- In the Slideshow Editor, choose Align Slides to Beats from the Slideshow Action pop-up menu (with a gear icon).

To reset audio adjustments

You can always reset any audio adjustments you've made to an audio clip applied to a slideshow.

- 1 Open the Audio Adjustments HUD by choosing Adjust Audio from the Slideshow Action pop-up menu (with a gear icon).
- 2 In the Audio Adjustments HUD, click the Revert All button.



Click this button to reset all audio adjustments.

Removing Audio Clips from Your Slideshow

You can remove audio clips from both the main and secondary audio tracks.

To remove an audio clip from the main audio track

- 1 In the Browser, select the audio clip in the main audio track.
- 2 Press the Delete key.

The audio clip is removed from the main audio track, and the green background in the Browser disappears.

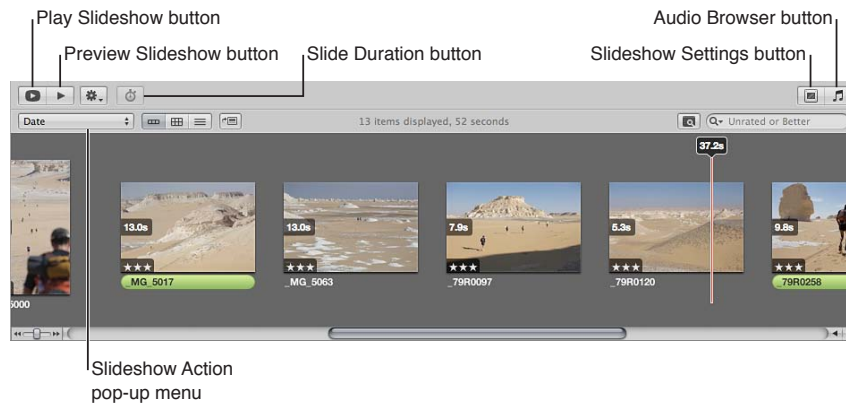
To remove an audio clip from the secondary audio track

- 1 In the Browser, select the audio clip you want to remove from the secondary audio track.
- 2 Press the Delete key.

The audio clip is removed from the secondary audio track.

Viewing Your Slideshows in Aperture

You can view your slideshow at any time in one of two ways in Aperture: in full-screen mode or in the Slideshow Editor.



To preview your slideshow in the Slideshow Editor

- 1 In the Slideshow Editor, click the Preview Slideshow button.
- 2 Click the Space bar to begin playing the slideshow, and click it again to pause playback.

The slideshow plays in the Slideshow Editor, and a playhead in the Browser moves across the photos as they appear in the slideshow.

To play your slideshow in full-screen mode

- In the Slideshow Editor, click the Play Slideshow button.

The computer screen turns blank, and then the slideshow begins playing. Press the Esc key at any time to exit the slideshow.

Note: If you have a dual-display system, you can choose which display the slideshow appears on when you click the Play Slideshow button. Choose Aperture > Preferences, then click Appearance. Choose which display you want the slideshow to appear on from the “View Slideshows on” pop-up menu.

Sharing Your Slideshow Movies

Once you have completed your slideshow, you are ready to share it with clients and friends. Aperture provides a few simple controls for exporting your slideshow as a movie, in the size and format most suitable for your intended audience. When you're ready to share your slideshow, the first thing you need to decide is how it will be viewed. By default, the Export dialog provides options for exporting your slideshow as a movie suitable for playback on iPhone, iPod, iPod touch, or iPad; as a movie for the web to be posted on YouTube; or as a high-resolution movie compatible with HD 720p or HD 1080p televisions. If necessary, you can also output your slideshow movie in a custom size.

To share your slideshow as a movie

- 1 In the top-right corner of the Slideshow Editor, click the Export button.
- 2 In the dialog that appears, give the slideshow movie a name in the Save As field, then select a location to save it to.
- 3 Choose the viewing platform for your movie from the "Export for" pop-up menu.
- 4 If you want to export a slideshow movie in a custom size, choose Custom from the "Export for" pop-up menu, choose a codec from the Codec pop-up menu, enter the number of frames per second in the Frame Rate field, enter the width and height, in pixels, in the Width and Height fields, then choose a compression setting from the Quality pop-up menu.
- 5 If you want Aperture to automatically send a copy of the slideshow movie to iTunes, select the "Automatically send slideshow to iTunes" checkbox.
- 6 If you want to be notified when the export process is complete, select the "Show alert when finished" checkbox.
- 7 Click Export.

An Overview of Creating Webpages

In Aperture, you can easily create webpages of your photos that you can post to your own website. Then clients can conveniently review your work via the Internet.

You can use built-in Aperture webpage themes and designs to create two types of webpages:

- *Web galleries* show your photos in eye-catching settings and are designed to display photos without your having to lay out pages by hand. Aperture automatically creates the appropriate number of webpages and populates them with the selected photos. You can then adjust the pages to make the photos appear as you want them. You can also choose the metadata information, such as captions, names, and ratings, that appears next to each photo.
- *Web journals* allow you to mix photos and text manually on the page and are ideal for projects in which you show photos with narrative to support them. For example, you might create web journal pages that show and tell the story of an overseas shoot or a journalistic project. When working with web journals, you manually add pages, photos, and text to your web journal. You can choose a theme to apply to all your pages, and you can change the layout of photos and text on your web journal pages.

To create a web gallery or web journal, you create a webpage or web journal album. When you select the album in the Library inspector, the Webpage Editor appears. The Webpage Editor is where you design your webpages, including changing the theme, positioning photos, and adding text.

After you've laid out your web gallery or web journal pages in the Webpage Editor, you can save them as HTML pages that you can post to your webpage server. Once the photos are posted online, you can give clients the URL of the pages, and clients can view them remotely.

Important: Web galleries and web journals created in Aperture are not visible when working with your Aperture library in iPhoto. However, your web galleries and web journals are not discarded. To view and work with your web galleries and web journals, open the Aperture library in Aperture.

Creating Web Galleries and Web Journals

Creating Webpage Albums

Aperture web galleries offer a way to showcase your photos on the web. You have a number of options for designing these pages. You can choose the type of information to accompany each photo, such as name and rating. You can also specify the number of columns and rows you want on each page.

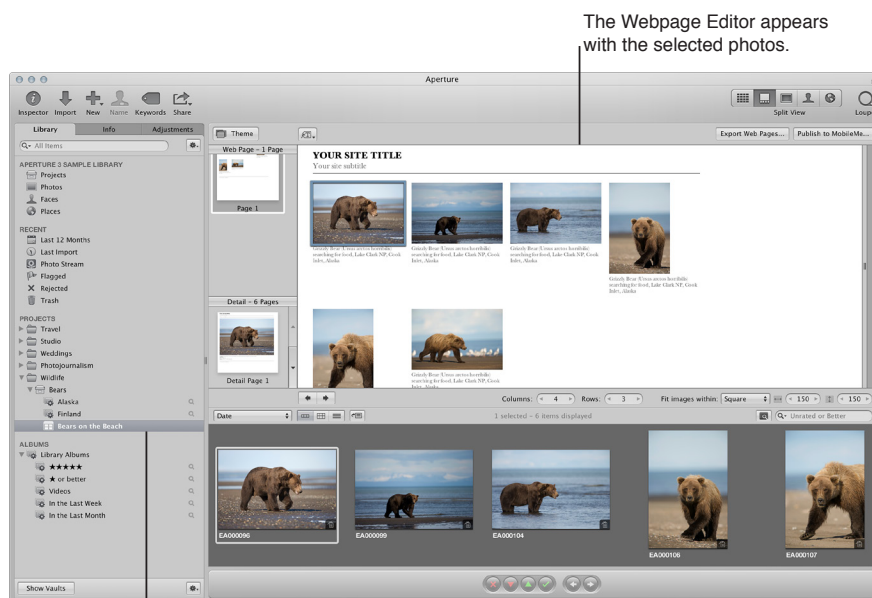
To create a web gallery, you must first create a webpage album that holds your web gallery photos. The easiest way to do this is to select photos you want to appear in the web gallery, create a webpage album, and have Aperture automatically place the photos on the web gallery pages. Aperture creates as many webpages as necessary to hold all of the selected photos. You can also create an empty webpage album and then drag photos into the album.

To create a new webpage album from selected photos

- 1 Do one of the following:
 - In the Browser, select the photos you want to place on your web gallery pages.
 - Select an item in the Library inspector.
- 2 Do one of the following:
 - Choose File > New > Web Page.
 - Control-click in the Library inspector, then choose New > Web Page from the shortcut menu.
 - Choose Web Page from the New pop-up menu in the toolbar.
- 3 In the dialog that appears, give your webpage album a name, select a theme, then click Choose Theme.

Note: Make sure the “Add selected items to new web page” checkbox is selected.

The new webpage album appears in the Library inspector, with the selected photos.



The Webpage Editor appears with the selected photos.

The new album you created appears in the Library Inspector.

To create a new, empty webpage album

- 1 Do one of the following:
 - Choose File > New > Web Page.
 - Control-click in the Library inspector, then choose New > Web Page from the shortcut menu.
 - Choose Web Page from the New pop-up menu in the toolbar.
- 2 In the dialog that appears, give your webpage album a name, select a theme, and make sure to deselect the “Add selected items to new web page” checkbox.
- 3 Click Choose Theme.

A new, empty webpage album is added to the Library inspector. You can drag the photos you want into the new webpage album from the Browser or from other items selected in the Library inspector.

Creating Smart Web Page Albums

You can use the Aperture Smart Album feature to gather photos from the library or from projects and place them on web gallery pages automatically. Smart Albums gather photos based on search criteria that you specify. For example, you can create a Smart Web Page Album that gathers your select photos from across the entire Aperture library. Then each time you rate a photo Select, Aperture automatically adds it to your Smart Web Page Album and to its web gallery. You can then update your website with pages of your most up-to-date select photos.

Note: The Smart Album feature is not available for web journals.

To create a Smart Web Page Album of your photos

- 1 Do one of the following:
 - Choose File > New > Smart Web Page.
 - Control-click in the Library inspector, then choose New > Smart Web Site from the shortcut menu.
- 2 Enter a name for the new Smart Web Page Album in the Library inspector.
- 3 If necessary, click the Smart Settings HUD button (with a magnifying glass icon) to the right of the Smart Web Page Album name to show the Smart Settings HUD.
- 4 In the Smart Settings HUD, specify the search criteria for the Smart Web Page Album.

The Smart Web Page Album is created and filled with the photos that meet the search criteria.

You can change the search criteria, thus changing the contents of the Smart Web Page Album, at any time. For more information about working with Smart Albums, see [An Overview of Smart Albums](#) on page 255.

Creating Web Journal Albums

Web journals provide a great way to mix photos and text to chronicle trips and explain photos on the web. You can manually add and arrange photos and text in your web journal.

To create a web journal, you must first create an album that holds your web journal's photos. The easiest way to do this is to select photos you want to appear in the web journal and create an album. Aperture creates a web journal album that contains the photos you selected, and the Webpage Editor appears. The Browser contains the selected photos, which you can then manually place on the webpages.

To create a web journal album from selected photos

- 1 Do one of the following:
 - In the Browser, select the photos you want to place on your web journal pages.
 - Select an item in the Library inspector.
- 2 Do one of the following:
 - Choose File > New > Web Journal.
 - Control-click in the Library inspector, then choose New > Web Journal from the shortcut menu.
 - Choose Web Journal from the New pop-up menu in the toolbar.
- 3 In the dialog that appears, give your web journal album a name, select a theme, then click Choose Theme.

Note: Make sure the "Add selected items to new web journal" checkbox is selected.

The selected photos appear in the Browser. You can then manually add photos to your web journal pages from the Browser or from other items selected in the Library inspector.

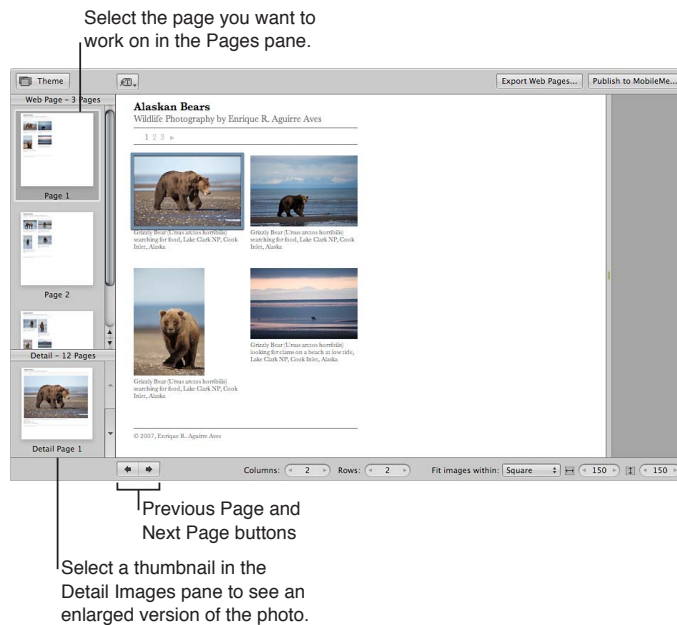
To create a new, empty web journal album

- 1 Do one of the following:
 - Choose File > New > Web Journal.
 - Control-click in the Library inspector, then choose New > Web Journal from the shortcut menu.
 - Choose Web Journal from the New pop-up menu in the toolbar.
- 2 In the dialog that appears, give your web journal album a name, select a theme, and make sure to deselect the "Add selected items to new web journal" checkbox.
- 3 Click Choose Theme.

A new, empty web journal album is added to the Library inspector. You can drag the photos you want into the new web journal album from the Browser or from other items selected in the Library inspector. To make changes to the web journal pages, you use the controls in the Webpage Editor.

Viewing and Navigating Through Webpages

As you modify your web galleries and web journals, there are some easy ways to view and navigate through your pages.



To view a particular webpage

Do one of the following:

- Click the Previous Page or Next Page button to display a different page.
- Use the scroll gesture in the Pages pane of the Webpage Editor to locate the page, then click the page.

When someone clicks a photo on a page in your website, a page showing an enlarged view of the photo appears. You can view these enlarged photos in the Webpage Editor.

To see an enlarged photo from a webpage

Do one of the following:

- In the Webpage Editor, position the pointer over the photo, then click the Detail button (with a curved arrow).
- Click the up arrow and down arrow buttons on the side of the Detail Images pane to navigate through detail pages for the photos in a web gallery or web journal.

To return to the page view after viewing an enlarged photo

Do one of the following:

- In the Webpage Editor, click the Index link above the photo.
- Click a page in the Pages pane.

Choosing and Modifying Themes

Aperture provides a variety of themes that you can choose for your web gallery or web journal. The theme you choose for your pages determines the basic template design of the page. Make sure to explore the themes to see which best suits your work.

You choose a theme type and a theme when you create a new web gallery or web journal album, but you can change the theme at any time. After a theme is applied to your pages, you can modify it by changing the number and size of photos on the page.

You can also display photos with metadata and have copyright information appear on your pages.

To change the theme for your web gallery or web journal

- 1 Click the Theme button at the top-left corner of the Webpage Editor.
- 2 In the dialog that appears, select the theme you want to use, then click Choose.

To change the number of columns and rows of photos on the page

After you've chosen a theme, you can change how many photos appear on each page.

Note: When a web journal is open in the Webpage Editor, only the Columns value slider is available. You can manually add as many rows of photos to a page as you need by dragging a photo from the Browser below the current row of photos in the Webpage Editor.

- In the Webpage Editor, double-click in the number field of the Columns or Rows value slider and enter a new number, or click the left or right arrow.

When you change the number of columns or rows, Aperture automatically updates all the pages in the web gallery or web journal to reflect the new settings.

To change the size of photos on a page

- 1 In the "Fit images within" pop-up menu in the Webpage Editor, choose whether you want the photos to be spaced according to their longest edge or both edges.
- 2 To increase or decrease the photo size, double-click in the number field of the Width and Height value sliders and enter new numbers, or click the left or right arrow.

To specify the types of metadata that appear with your photos

You can specify that your photos appear with metadata in your web gallery or web journal. You can choose different combinations of metadata to appear on your pages. For example, you might display your photos with a simple set of metadata that includes the filename, caption, and photo date.

- Choose an option from the Metadata View pop-up menu at the top of the Webpage Editor.

To change the copyright information that appears in web galleries and web journals

Web galleries and web journals also appear with copyright information on the page. You can select the copyright text on the page and change it. You can also specify the copyright information you want for all your pages in the Preferences window.

- 1 Choose Aperture > Preferences, then click Export.
- 2 Type the text you want in the Web Copyright field.

Working with Web Gallery Pages

Arranging, Adding, and Deleting Photos in a Web Gallery

When you create a web gallery, the photos in it are placed automatically. You can then adjust the placement of photos on web gallery pages and add and delete photos in the Webpage Editor.

Note: You can't select and use the Lift, Stamp, Straighten, Crop, or Red Eye tool or any Quick Brush adjustments when using the Webpage Editor. To use these tools to make a change to a photo in a web gallery or web journal, select the photo in the Browser, then click the Show Viewer button at the top of the Browser (to the right of the List View button). The selected photo appears in the Viewer, and you can make changes. Click the Show Viewer button again to return to the Webpage Editor.

To change the viewing order of your photos in a web gallery

- Drag the photos to different locations, either in the Webpage Editor or the Browser.

You can add photos to a web gallery after you've created it.

To add a photo to a web gallery

- Drag a photo from a project, folder, album, or the library into the webpage album for the web gallery.

To delete a photo from a web gallery

- Select the photo in the Browser, then choose Photos > Remove from Album (or press the Delete key).

Changing Text on Web Gallery Pages

Depending on the theme you choose for your web gallery, pages may appear with titles, subtitles, or headings. You can change the sample text to text appropriate for your web gallery pages.

To change titles and subtitles on web gallery pages

- In the Webpage Editor, click the title, subtitle, or heading you want to change, then type the text you want.

Hiding or Showing Photo Plate Numbers in Web Galleries

You can turn on or turn off the display of plate numbers for photos in your web galleries. By default, Aperture does not display plate numbers for photos.

To turn on the display of photo plate numbers in a web gallery

- Choose Enable Plate Metadata from the Metadata View pop-up menu at the top of the Webpage Editor.

Plate numbers appear below each photo in the web gallery. Choose Disable Plate Metadata from the Metadata View pop-up menu to turn off the display of plate numbers.

Working with Web Journal Pages

Adding, Arranging, and Deleting Web Journal Photos and Text

As you work with a web journal, you can add photos and text to pages, add pages, choose header types, delete pages, and change the page order.

You must manually place your photos and add text on web journal pages.

To add photos to a web journal page

- Drag photos from the Browser to the page in the Webpage Editor.

You can also drag several photos into place at once by selecting and dragging groups of photos. For example, if your web journal page is set to display four photos per row, you can arrange four photos in the order you want them and then drag all four to the page at once.

To move photos on a web journal page

- 1 In the Webpage Editor, click a photo to select it.
- 2 Drag the grid mark at the top of the photo box to move the photo to the new location. Release the mouse button when a green bar appears where you want to place the photo.

Aperture places your photos in the photo boxes designed for the page.

To remove a photo from a web journal page

- 1 In the Webpage Editor, click the photo to select it.
- 2 Click the Remove (–) button to remove the selected photo box.

To add text to a web journal page

You can add text boxes to web journal pages as you need them. Text boxes are added to the page one after another. New text boxes are always added to the bottom of the page, but you can drag text boxes to new locations when you need to rearrange them.

- 1 In the Pages pane of the Webpage Editor, select the thumbnail of the page to which you want to add text.
- 2 Click the Add Text Block button at the top of the Webpage Editor.
- 3 Enter the text you want.

To move a text box

- 1 In the Webpage Editor, click the text box to select it.
- 2 Position the pointer on the grid mark at the top of the text box and drag the text box until you see a green bar appear where you want to place the text box, then release the mouse button.

To remove a text box from a web journal page

- 1 In the Webpage Editor, click the text box to select it.
- 2 Click the Remove (–) button at the top-right corner of the selected text box to remove it.

Adding Web Journal Pages

You can add pages to your web journal as you need them. You can also have Aperture create pages in your web journal to hold photos that have a type of metadata, such as a specific rating, keyword, or photo date. For example, you can have Aperture create a page for each keyword assigned to the album's photos and place photos that have certain keywords on the correct pages automatically. Or, if your album holds photos with four- and five-star ratings, you can create a page that automatically holds the five-star photos and another that holds the four-star photos.

You can have Aperture add pages for photos based on:

- Day
- Keyword
- Rating
- Byline
- City
- Category

To add a page to a web journal

- 1 In the Webpage Editor, select a thumbnail page in the Pages pane where you want the new page to appear.

The new page will appear after the selected page.

- 2 Click the Add Page (+) button to add a new page.

To add a new page based on a metadata category

- 1 In the Webpage Editor, select a thumbnail page in the Pages pane where you want the new page to appear.

The new page will appear after the selected page.

- 2 Choose an option for the type of page you want to add from the Page Action pop-up menu (with a gear icon).

Choosing a Header Style for a Web Journal Page

Depending on the theme you choose, you can change the look of web journal pages by choosing a style that displays either a heading followed by text or a heading followed by a photo.

To choose the header style for a web journal page

- 1 In the Webpage Editor, select a page in the Pages pane.
- 2 Choose either Header with Text or Header with Image from the Page Template pop-up menu.

Note: The theme applied to the web journal must support photos in the header.

Deleting Pages from a Web Journal

When you no longer need a page, you can delete it from the web journal.

To delete a page from a web journal

- 1 In the Webpage Editor, select the thumbnail of the page you want to delete in the Pages pane.
- 2 Click the Remove Page (–) button to delete the page, then click the Delete button when prompted.

Reordering Pages in a Web Journal

You can change the order of web journal pages when necessary.

To move a page up or down in the page order of a web journal

- 1 In the Webpage Editor, select the thumbnail of the page you want to move in the Pages pane.
- 2 Choose either Move Current Page Up or Move Current Page Down from the Page Action pop-up menu (with a gear icon).

Exporting Webpages as HTML Files

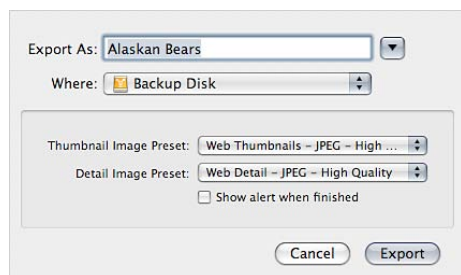
Integrating your Aperture webpages into your business's website requires you to thoroughly understand your website structure and web server. With some planning, you can modify your homepage or access pages to provide links to your Aperture webpages.

You can also open your webpages in a standard HTML editor and make the changes required for them to work in your site. You can add and revise the HTML code that creates the page structure. You can plan how the pages link to the structure of your website and provide additional items such as navigation buttons or links that normally appear on your webpages. If you use a web design service to create and maintain your site, you can supply your Aperture files to your design service in a folder and allow the design service to integrate your Aperture webpages. If you are your own webmaster, you can transfer your Aperture web files to your web server or Internet service provider using a copying method such as FTP, or using the transfer features of your webpage service.

You can export webpages that you create in Aperture. When you export your Aperture webpages, you can export them to a folder on your computer to keep them organized in one place. You can name the folder and choose the image quality and file types that are created. Aperture has web export presets you can choose that automatically set up the export of webpages. You can choose an existing export preset or create your own.

To export webpages

- 1 In the Webpage Editor, click the Export Web Pages button.
- 2 In the dialog that appears, type a name for the folder that will hold the webpage files in the Export As field.



- 3 Choose a location for the webpage folder from the Where pop-up menu.
- 4 Choose a web export preset for your thumbnail images from the Thumbnail Image Preset pop-up menu.
- 5 Choose a web export preset for your detail image pages from the Detail Image Preset pop-up menu.

- 6 If you would like to be notified when the export process is complete, select the “Show alert when finished” checkbox.
- 7 When you’re ready to export your webpages, click Export.

The webpage is exported to the location you specified.

Note: If you would like to check on the progress of an export operation, choose Window > Show Activity. The Activity window displays the progress of each export operation. You can also use this window to pause and cancel an export operation.

Working with Web Export Presets

Viewing the Settings for a Web Export Preset

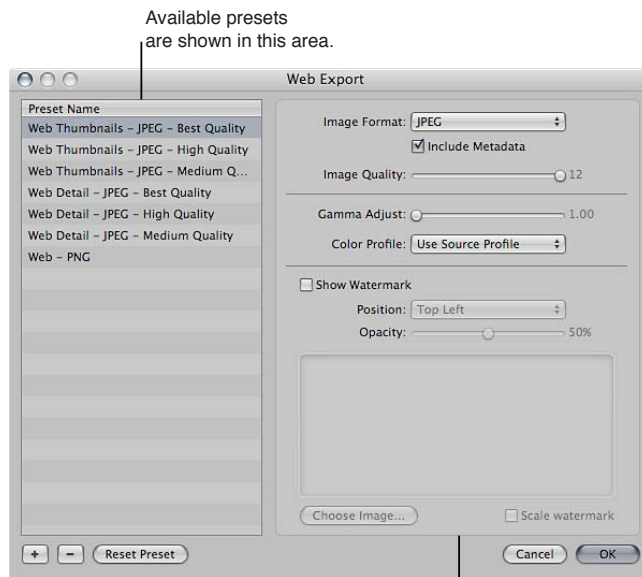
Web export presets are groups of saved export settings that are configured to produce different types of web images. You use them to help you quickly and easily export your photos for use on the web. Aperture comes with a number of web export presets, and you can create your own.

Before using a web export preset, whether it’s one that comes with Aperture or one that you created, you can view its settings to make sure they are exactly what you want.

To view the settings for an export preset

- Choose Aperture > Presets > Web Export.

The Web Export dialog appears, listing the presets available and their export settings.



The right side of the dialog shows the settings for the selected preset.

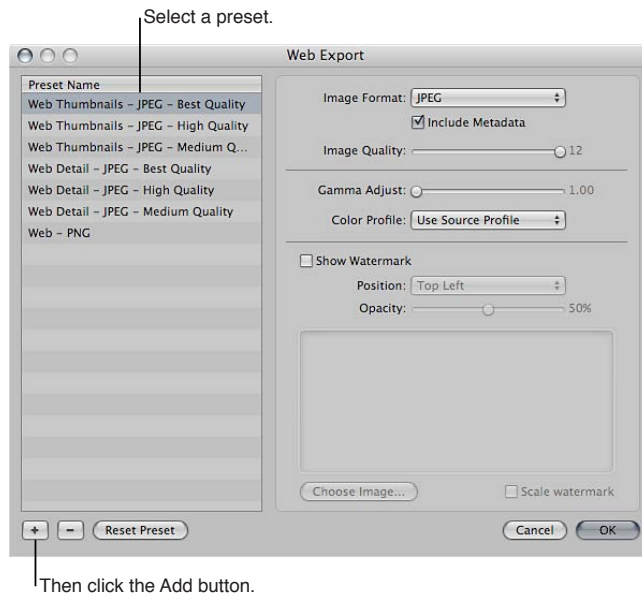
Creating Web Export Presets

If none of the existing web export presets suit your needs, you can create your own. An easy way to create a new export preset is to copy an existing preset and then modify the copy.

To create a new web export preset

- 1 Do one of the following:
 - Choose Aperture > Presets > Web Export.
 - In the Webpage Editor, click the Export Web Pages button, then choose Edit from the Thumbnail Image Preset or Detail Image Preset pop-up menu.

The Web Export dialog appears.



- 2 Select a web export preset on which to base your new preset, then click the Add (+) button.
A new preset, based on the export preset you selected, appears highlighted in the Preset Name list.
- 3 Enter a new name for the preset.
- 4 Make your changes to the export settings, then click OK.

Modifying Web Export Presets

After examining a selected preset's settings, you may want to change something about the preset. To modify a selected preset, you can simply change the necessary settings and click OK. The next time you export using that preset, Aperture remembers your modified settings and exports your web images accordingly.

When you modify an existing preset, you lose its original settings.

To change a web export preset

- 1 Do one of the following:
 - Choose Aperture > Presets > Web Export.
 - In the Webpage Editor, click the Export Web Pages button, then choose Edit from the Thumbnail Image Preset or Detail Image Preset pop-up menu.

The Web Export dialog appears.

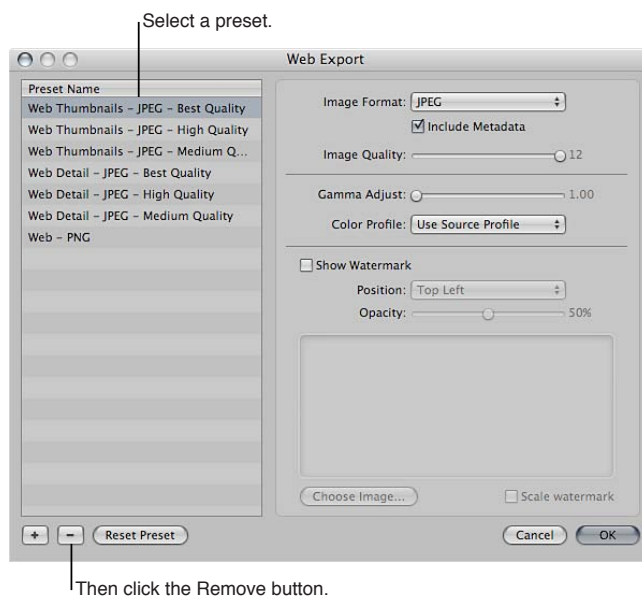
- 2 Select the export preset you want to change, modify its settings, then click OK.

Deleting Web Export Presets

You can delete web export presets when you no longer need them.

To delete a web export preset

- In the Web Export dialog, select the preset, then click the Remove (-) button.



The preset is permanently deleted.

Adding Watermarks to Webpage Photos

You can add a graphics file to your photos as a watermark to discourage others from using your photos without your permission. Watermarks are especially useful when applied to photos posted on the web.

Use the following guidelines to create high-quality watermarks for your photos:

- Save your watermark as a Photoshop (.psd) file with a transparent background.
- Create multiple sizes of your watermark so that you can select the one that is the best match for the output size of the exported photo.

Note: If a watermark file is larger than the photo you wish to export, Aperture automatically scales the watermark down to fit the photo. (Aperture does not scale watermarks up.)

- After you create a watermark, save it as part of a web export preset, so you can reuse it whenever you need.

Note: Export presets and web export presets are independent of one another. Make sure to save your watermark as part of the appropriate preset.

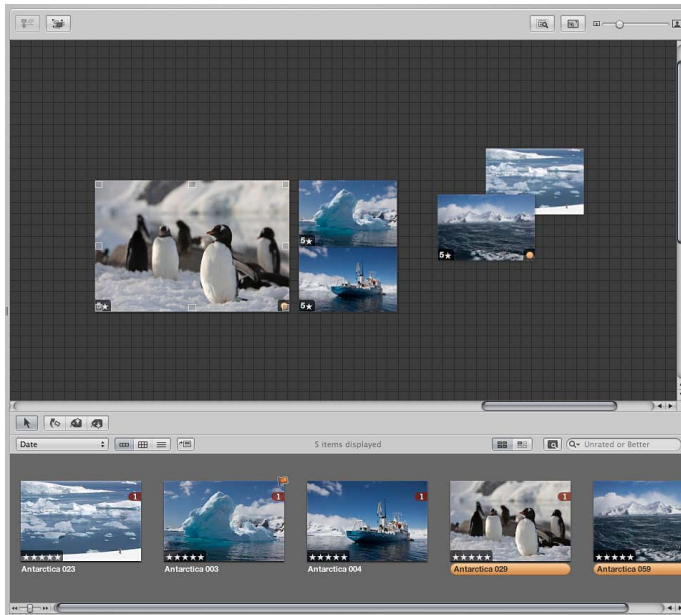
To create a preset that adds a watermark to your exported web photos

- 1 Choose Aperture > Presets > Web Export.
- 2 In the Web Export dialog, select the web export preset you want to modify, or click the Add (+) button to create a new preset.
- 3 Select the Show Watermark checkbox.
- 4 Click the Choose Image button.
- 5 Select the image you want as a watermark, then click Choose.
- 6 Choose where you want the watermark to appear on the photo from the Position pop-up menu.
- 7 To adjust the opacity of the watermark, drag the Opacity slider to a new position.
- 8 When you're satisfied with how your watermark appears in the watermark preview area, click OK.

An Overview of the Light Table

The Light Table provides a large, open space where you can freely resize, group, and rearrange photos. You can also easily arrange related photos together to compare them, as you might during color correction.

The Light Table is used to arrange and view photos. You can work with photos in the Light Table just as you would work with slides on a physical light table. You can place a selection of photos in the Light Table for review and drag them to new positions, arranging, grouping, and resizing them in different combinations to see how they might look on webpages or book pages. The Light Table automatically displays yellow guidelines that show you how the item you're working with aligns with other items already on the page. You never run out of space in the Light Table—it grows as you add photos to it, and it's easy to adjust the view by zooming in or changing the area of the Light Table that's shown.



You can use the Light Table when color correcting many related photos. You can arrange related photos together and carefully compare the color values between photos.

You can also use the Light Table to sort photos into related piles. After sorting, you can select groups of photos and assign keywords to all the photos in a group at once.

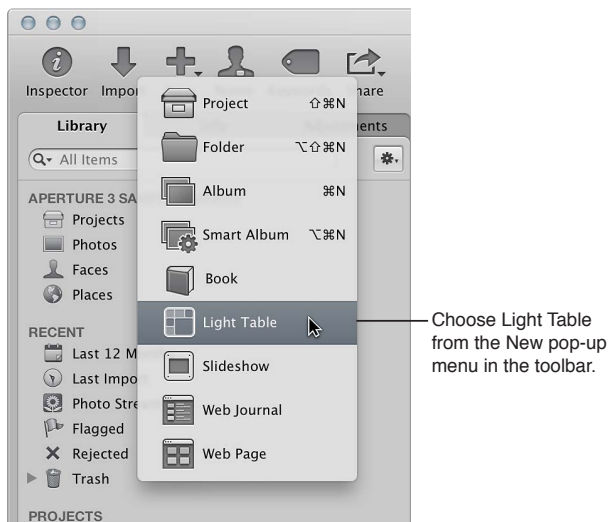
You can use the Light Table to create editorial layouts as well, arranging photos onscreen to tell a story. You can put the selects from a given project in the Light Table and arrange them so that they progress visually, eliminating repetitive photos. As you group and pair photos of the same subject, you'll find the Light Table ideal for examining the relationships between photos.

Creating a Light Table Album

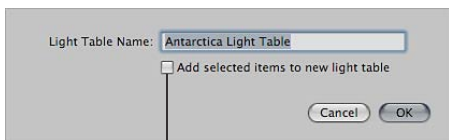
To view photos in the Light Table, you first create a Light Table album. You can create a new, empty album and drag photos into it, or you can select photos in a project and create a Light Table album to hold them.

To create a new, empty Light Table album

- 1 In the Library inspector, select the project or folder where you want the new Light Table album to appear. If you want the Light Table to appear in the Light Tables section of the Library inspector, select Projects.
- 2 Do one of the following:
 - Choose File > New > Light Table.
 - Control-click the item in the Library inspector, then choose New > Light Table from the shortcut menu.
 - Choose Light Table from the New pop-up menu in the toolbar.



- 3 In the dialog that appears, enter a name for the Light Table, and make sure to deselect the “Add selected items to new light table” checkbox.

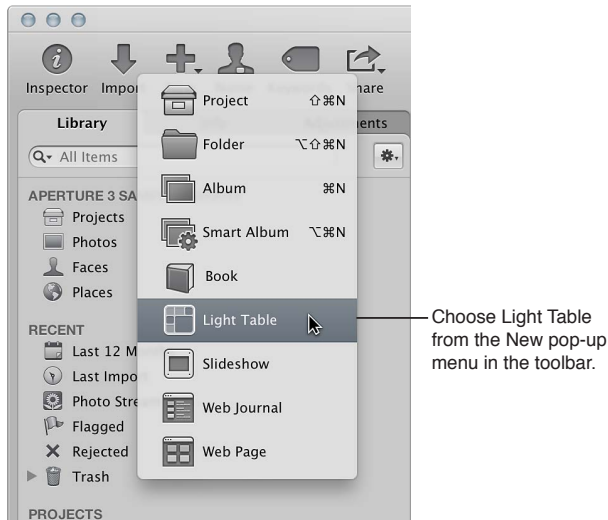


- 4 Click OK.

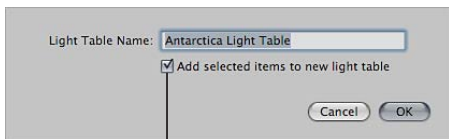
The new empty Light Table album appears in the Library inspector. Now you can drag photos into the new Light Table album from any item in the Library inspector.

To create a Light Table album that holds a selection of photos

- 1 In the Browser, select the photos you want in the Light Table album.
- 2 Do one of the following:
 - Choose File > New > Light Table.
 - Control-click the selected item in the Library inspector, then choose New > Light Table from the shortcut menu.
 - Choose Light Table from the New pop-up menu in the toolbar.



- 3 In the dialog that appears, enter a name for the Light Table, and make sure the "Add selected items to new light table" checkbox is selected.



- 4 Click OK.

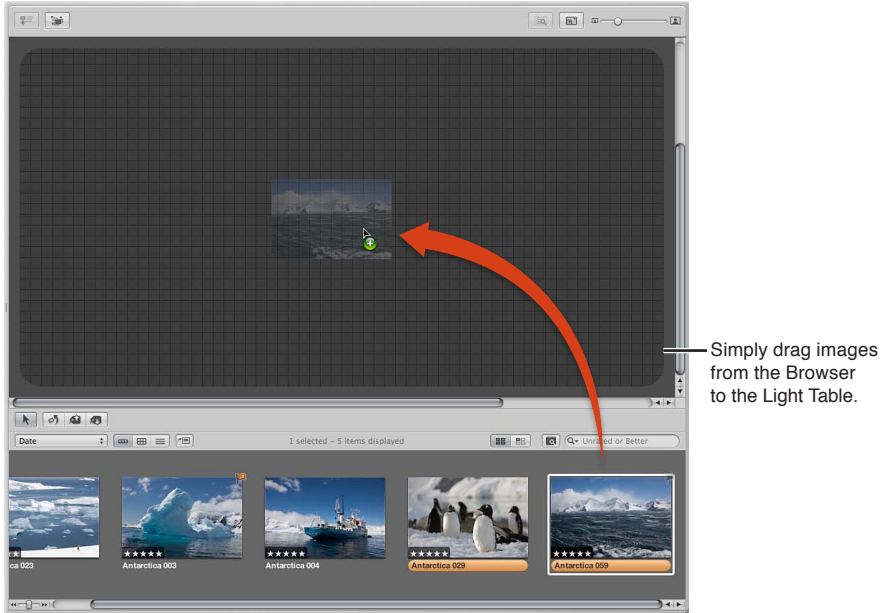
The new Light Table album containing your photo selection appears in the Library inspector. If necessary, you can drag additional photos from the Browser to the Light Table album in the Library inspector.

Placing and Viewing Photos in the Light Table

After adding photos to the Light Table album, you can select the ones you want to work with and place them in the Light Table for viewing.

To add photos to the Light Table

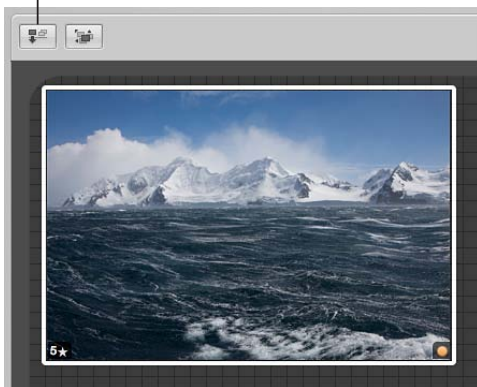
- Select a Light Table album in the Library inspector, then drag photos from the Browser to the Light Table.



To remove a photo from the Light Table

- Select the photo in the Browser, then click the Put Back Selected button at the top-left corner of the Light Table.

Click the Put Back Selected button to remove a selected photo.

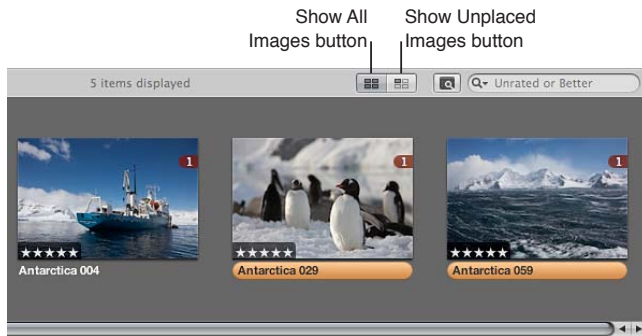


The photo disappears from the Light Table but remains available in the Browser.

To see only photos in the Browser that remain unplaced

If you have many photos in a Light Table album, it may be difficult to remember which photos you haven't yet placed in the Light Table. You can set the Browser to show only those photos that haven't been placed in the Light Table.

- Click the Show Unplaced Images button.



To see the entire contents of the Light Table album in the Browser again, click the Show All Images button.

Moving and Resizing Photos in the Light Table

You can drag photos to different locations in the Light Table, trying out different combinations and orientations. For example, you might take a group of related photos and arrange them to see how they'd appear on a print page. You can also enlarge or reduce photos. After resizing a photo, you can quickly reset the photo back to its original size.

To move photos in the Light Table

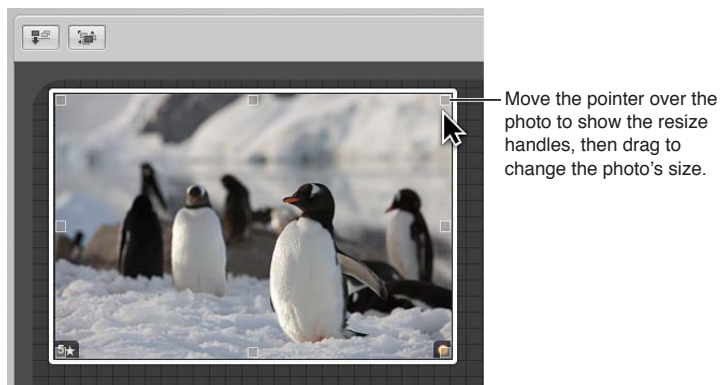
- In the Light Table, select the photos you want to move and drag them to a new location.

To drag a photo to a location offscreen

- Drag the photo to the border of the Light Table until the screen begins to scroll.

To change the size of a photo

- Position the pointer over the photo, then drag a resize handle.



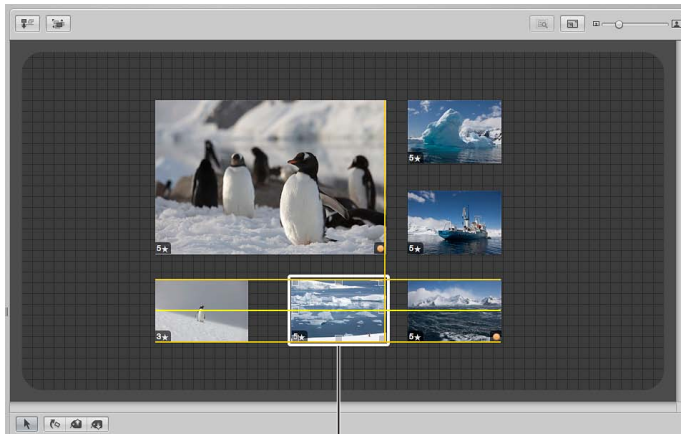
To reset a photo to its previous size

- Control-click the photo, then choose Reset Selected Size from the shortcut menu.

Aligning and Arranging Photos in the Light Table

As you drag photos in the Light Table, you'll see yellow guidelines appear that mark the vertical, horizontal, and center points of the stationary, unselected photos in relation to the photos you are dragging. Using the guidelines, you can make sure that your selected photos visually align with other photos in the Light Table.

You can also select a group of photos in the Light Table and automatically align them according to their top, bottom, side edges, or by their centers. In addition, you can have Aperture arrange a selected group with equal space between each photo.



When you drag a photo, guidelines appear, helping you align it with the other photos.

To manually align photos

- 1 In the Light Table, select the photos you want to align, making sure that the photo or group of photos you want to align with remain unselected.
- 2 Drag the selected photo or group of photos.



As you drag the selected photo or group of photos, yellow guidelines appear as a visual cue to help you align the selected photos with the unselected ones. When you quit dragging, the yellow guidelines disappear.

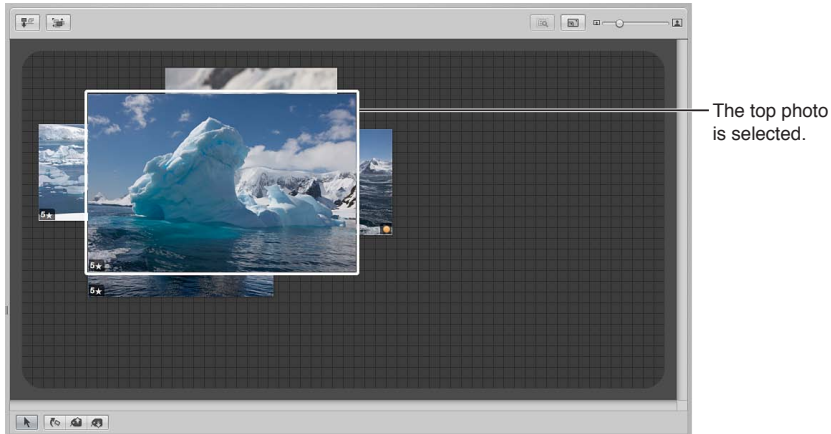
To automatically arrange photos in the Light Table

- In the Light Table, Control-click beside the photos, then choose Arrange All Items from the shortcut menu.

To reveal photos in the Light Table that are covered by other photos

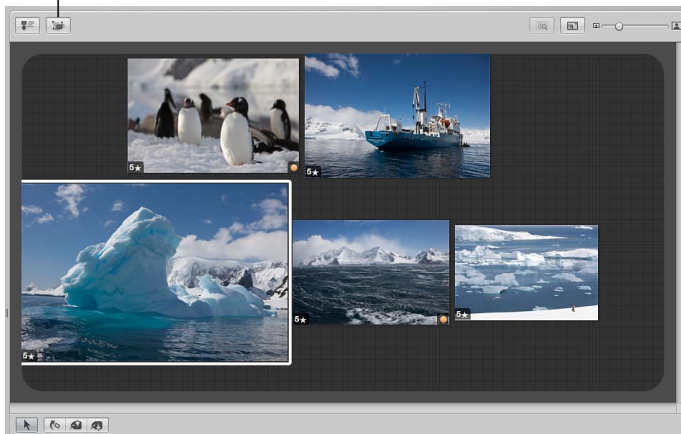
If some photos in a group are hidden behind other photos, you can also reveal, or uncover, all photos in the group.

- 1 Select the top photo in the group.



- 2 Click the Uncover button (or press Shift-X).

Click the Uncover button to reveal all photos under the selected photo.

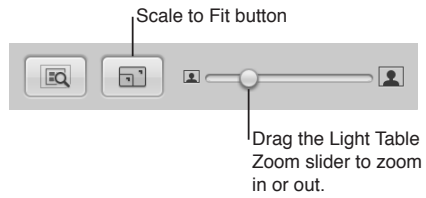


- 3 Select an uncovered photo.

The photos are regrouped, with the selected photo on top.

Adjusting the Light Table View

You can adjust the Light Table view to better view and work with photos. This is particularly useful when the Light Table is larger than your screen size. You can also increase the area of the Light Table.



To zoom in to or out of the Light Table

- Drag the Zoom slider to change the view.

To fit the Light Table to your screen size

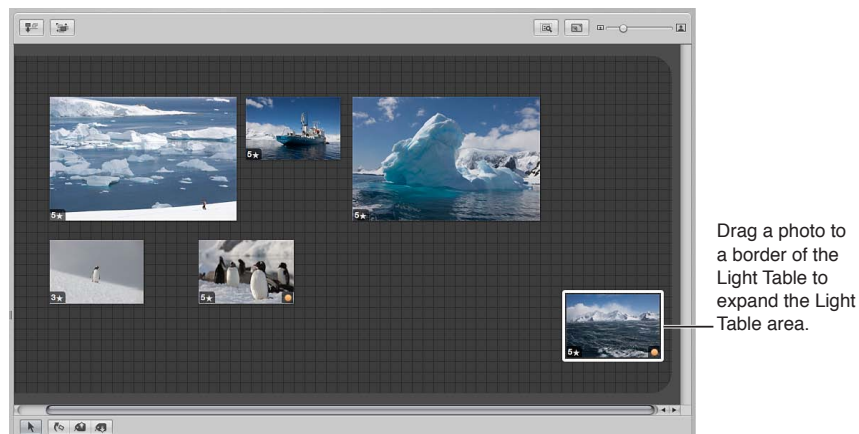
- Click the Scale to Fit button.

To change the Light Table view to 100 percent

- Control-click in a blank area of the Light Table, then choose Zoom to 100% from the shortcut menu.

To increase the area of the Light Table

- Drag a photo to the border of the grid background so that the area of the Light Table automatically expands.



Printing Light Table Arrangements

After arranging photos in the Light Table, you can print the photo arrangement for further review.

For more information about printing Light Table arrangements, see [Printing a Light Table Arrangement](#) on page 433.

Deleting a Light Table Album

You can quickly delete an entire Light Table album. If you've transferred photos from the Light Table album to other projects or albums, the photos in the other projects and albums remain unchanged, even though the Light Table versions are gone.

To delete a Light Table album

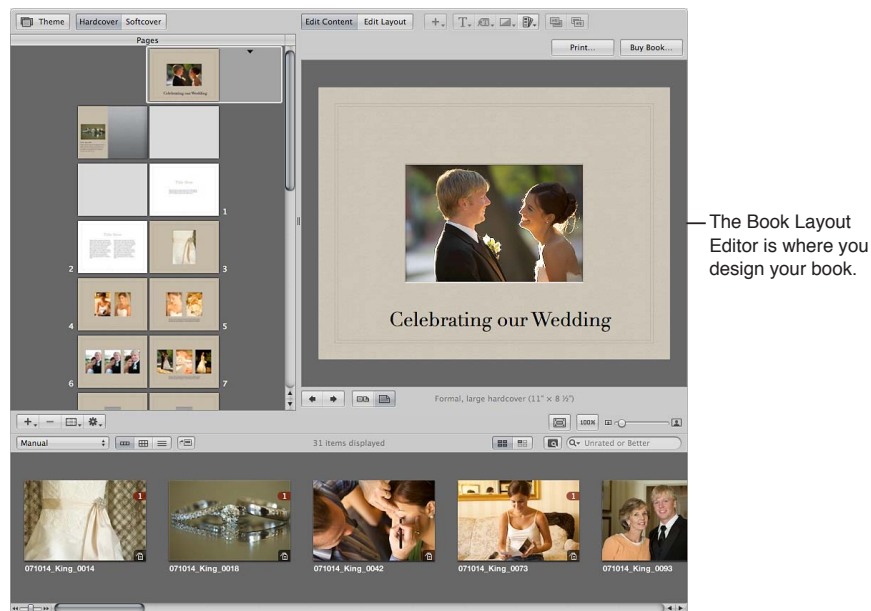
- 1 Select the Light Table album in the Library inspector.
- 2 Choose File > Delete Light Table (or press Command-Delete).

The deleted Light Table album is placed in the Aperture Trash. For more information about the Aperture Trash, see [Working with the Aperture Trash](#) on page 38.

An Overview of Creating Books

Using the book designs and page layouts included in Aperture, you can print outstanding portfolios of your work that show your photos in their best light. You can order printed books of your photos using the Apple print vendor service, which provides excellent printed results and direct delivery to you or your clients. You can also print your own custom books on a color printer or create files that you can hand off to a print vendor.

When you select or create a book album in the Library inspector, the Book Layout Editor appears along with the Browser. You use the Book Layout Editor to set up the page structure of your book and place photos and text on the pages.



The Pages pane on the left shows thumbnails of your book pages. You scroll through the thumbnails and click to select a page of your book to work on. A larger view of the selected page appears on the right.

When you first create a book album in the Library inspector, Aperture automatically creates a default set of pages for you. You then use the Book Layout Editor to format your pages and create any additional pages you need.

Books are based on a theme, or design, and master page layouts that present your photos in a standardized way. Click the Theme button to see the themes you can choose.

When you choose a theme, the Book Layout Editor provides a professionally designed set of master pages that determine how you mix text and photos on the page. For example, you can choose among master pages that create a cover page, pages of text in columns of various sizes, pages of photos in different arrangements, and pages with different combinations of photos and text. You'll find master pages provide a fast and convenient method for quickly laying out a book.

You can apply a master page design to any selected page to define where your text and photos appear. Pages appear with gray photo boxes to hold photos and text boxes to hold text. To add photos, you drag them into the photo boxes from the Browser. To add text, you select a text box and type or paste text into it. If you wish, you can also place metadata boxes next to photos to display a photo's version name, caption, keywords, and other metadata. You can also add a map showing the places where the photos in your book were shot.

If you prefer, you can build a book page by page. You can add a new page to your book, choose a master page design, fill in photos and text, and then create the next page, repeating the procedure for each page you add.

You can also select a group of photos in the Browser and have Aperture automatically place them in pages in your book. Aperture creates as many pages as you need and fills them with your photos. You can change the page design of individual pages later by applying different master page designs.

As you work on a book, you may need to adjust the layout of individual pages. For example, you may discover that one photo in a group should appear slightly larger. You can move and resize the boxes that hold photos on individual pages, making minor layout adjustments when a master page design doesn't quite suffice.

To change the design of a page, click the Edit Layout button. You can then work with the photo boxes and text boxes that appear on the page, resizing and rearranging them as necessary. The Book Layout Editor automatically displays yellow guidelines that show you how the item you're working with aligns with other items already on the page.

To add text and photos to your pages without changing the page layout, click the Edit Content button. You can then add photos and text to the page, but you can't move or resize the boxes on the page, which helps prevent unintended formatting changes.

You can also add photo, text, map, or metadata boxes to a page when you need them.

Click the Edit Layout button and then choose a text, metadata, map, or photo box option from the Add Box pop-up menu. When a box appears, you can resize and reposition it.

The Book Layout Editor also allows you to create covers, indexes, and blank pages, use automatic page numbers, and create or modify master page designs.

When your book is complete, you can purchase printed copies from the Apple print vendor for a fee.

Note: Although you can create books larger than 99 pages, there is a 99-page limit for books ordered through the Apple print vendor. When you try to order a book larger than 99 pages, a dialog warns you that there are too many pages. If you plan to print a book using the Apple print vendor, make sure to keep the number of pages at or below the 99-page limit.

If you prefer to print your books yourself, you can print your book using your own office printer or export your book as a PDF file that you can send to a print shop for printing.

Important: Books created in Aperture are not visible when working with your Aperture library in iPhoto. However, your Aperture books are not discarded. To view and work with your Aperture books, open the Aperture library in Aperture.

Planning Your Book

The amount of planning and work involved in creating a book varies with the type of project you're undertaking. If you're creating wedding photo albums, you may be primarily concerned with creating a reusable book design into which you can quickly place photos that tell the wedding story. The end result may be one or several printed copies per project.

On the other hand, producing a large book, such as a coffee table book, may require a good deal of planning, writing, design, page composition, proofing, and production work. In addition, you'll want to look ahead and decide how the manuscript should be printed and bound, the number of copies for the print run, and what copyright and permissions information your book should include.

For relatively simple books, here are some of the typical steps in the publishing process.

Stage 1: Planning Your Book's Cover

Choose a cover photo and decide what text should appear on the cover.

Stage 2: Creating Copyright Notices

Create any copyright or permissions notices you need.

Stage 3: Creating a Book Album

Create a book album and choose a theme for your book.

Stage 4: Choosing the Book's Photos

Place the book's photos in the book album and arrange them in the Browser in the order in which they should appear in the book. Don't place the photos on your pages yet.

Stage 5: Specifying the Book's Settings

Specify any overall settings for the book, such as size, hardcover or softcover binding, page numbering, and so on.

Stage 6: Creating the Book's Pages

Create the number of pages you need and apply master page designs to them.

Stage 7: Placing Photos in the Book

Have Aperture automatically place your photos, or drag the photos onto your pages.

Stage 8: Repositioning and Resizing Photos

Reposition and resize photos, adjusting individual page layouts if necessary.

Stage 9: Adding Text to Your Book

Add text to your pages and cover.

Stage 10: Proofing Your Book

Print a proof and carefully review the text and layout of the book.

Stage 11: Distributing Your Book

Send the book to the Apple print vendor, or create a PDF file that you can print or send to a print vendor. If you create a PDF file, make sure to include all the fonts you used in your book in the PDF file. If you're creating a larger, more complex book, contact your print vendor early in the process to make sure you consider printing issues such as the choice of paper stock, the use of inks and varnishes, and the review of bluelines, as well as other issues such as binding, packaging, shipping, and pricing.

If you routinely produce printed albums, you can create a book album that you can copy and reuse with each new project. After setting up master pages and individual page layouts, you can copy the book album to another project and then substitute the new photos, increasing your publishing productivity greatly. You can then customize certain pages, such as your cover, to provide any unique touches you like.

Creating a Book Album

You can create a book album in two ways:

- Select the photos you want to include in the book and then create a new book album containing the selected photos.
- Create a new book album and then drag the photos into it.

To create a book album from a selection of photos

- 1 Select the photos you want to use in the book, then do one of the following:
 - Choose File > New > Book.
 - Control-click a project, folder, or album in the Library inspector, then choose New > Book from the shortcut menu.
 - Choose Book from the New pop-up menu in the toolbar.
- 2 In the dialog that appears, enter a name for the book album in the Book Name field, and specify the following:
 - *Theme list*: Select a theme in the list to see a preview of its design on the right.
 - *Book Type pop-up menu*: Choose the physical size of the book.
- 3 Select the "Add selected items to new book" checkbox.
- 4 If you plan to use the Apple print service to print your book and you want to check the pricing for your book type and theme combinations, click the Options & Prices button.

Pricing options for ordering printed books through the Apple print service appear in your web browser.

- 5 When you're ready, click Choose Theme.

A new book album appears in the Library inspector, containing the selected photos.

To create a new, empty book album

- 1 In the Library inspector, select the project or folder where you want the new book album to appear.

If you want the book album to appear in the Books section of the Library inspector, select Projects.
- 2 Do one of the following:
 - Choose File > New > Book.
 - Control-click a project or folder in the Library inspector, then choose New > Book from the shortcut menu.
 - Choose Book from the New pop-up menu in the toolbar.
- 3 In the dialog that appears, enter a name for the book album in the Book Name field, and specify the following:
 - *Theme list*: Select a theme in the list to see a preview of its design on the right.
 - *Book Type pop-up menu*: Choose the physical size of the book.
- 4 Make sure the “Add selected items to new book” checkbox is not selected.
- 5 If you plan to use the Apple print service to print your book and you want to check the pricing for your book type and theme combinations, click the Options & Prices button.

Pricing options for ordering printed books through the Apple print service appear in your web browser.
- 6 When you’re ready, click Choose Theme.

A new book album with no photos appears in the Library inspector.

To add photos to any book album

- 1 In the Library inspector, select the project, folder, or album that holds the photos you want to add to the book album.

The project, folder, or album’s photos appear in the Browser.
- 2 Drag the photos from the Browser to the book album in the Library inspector.

Choosing a Theme

You choose a theme for your book when you create your book album. However, you can change the book's theme at any time. A theme provides a professionally designed set of master pages that determine how text and photos are placed on the page.

It's a good idea to explore the page styles and designs of Aperture themes. Some theme designs lend themselves better to presenting many pictures without much text; others to more traditional mixes of text and photos, such as you might find in coffee table books. Once you know the characteristics of the different themes, you can choose the theme best suited to a project.

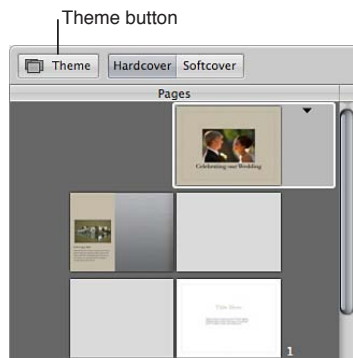
You can also create your own custom theme with the dimensions of your choosing. However, you can't order books from Apple created with custom themes. For more information about creating custom themes, see [Creating and Sharing Custom Themes](#) on page 549.

It's important to choose the theme you want at the beginning of a project. Each theme presents different combinations of master pages. Although you can change themes after you start a project and Aperture will attempt to convert your book structure to the new theme's master pages, you may need to redo some of your work to make up for differences between themes. It's not recommended that you complete a book and then change themes to see it with different layouts.

WARNING: It's possible to lose text when you change themes. If you change book themes, make sure to first copy the text you've entered into another document so that you have a backup copy.

To choose a new theme for your book

- 1 In the Book Layout Editor, click the Theme button.



A dialog appears, alerting you that you may lose text when you change themes and that any custom layouts you created will not be preserved.

- 2 Click OK.
- 3 Choose a book size from the Book Type pop-up menu.
- 4 In the theme list, select a theme.
- 5 Click Choose Theme.

After you change the theme, Aperture updates all of your pages to use the new theme.

Viewing Pages

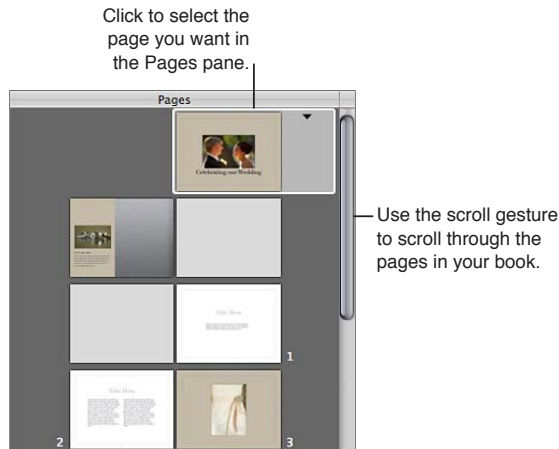
Navigating to Book Pages

As you work on a book, you can select and view particular pages, and you can change your view of the pages. You can display your pages laid out singly or side by side, and you can enlarge or reduce your view of book pages.

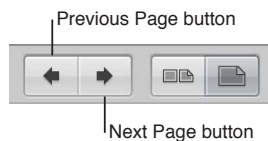
You can navigate to pages in your book by clicking a page in the Pages pane or by clicking the navigation buttons.

To view a particular page in a book

- Use the scroll gesture in the Pages pane of the Book Layout Editor to scroll to a specific page, then click the page to select it.

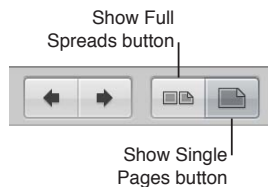


You can also quickly navigate through your pages by clicking the Previous Page and Next Page buttons.



Displaying Single Pages or Spreads

You can set the Book Layout Editor to display your pages singly or side by side. For example, you can display pages side by side to see how photos work beside each other in two-page spreads.



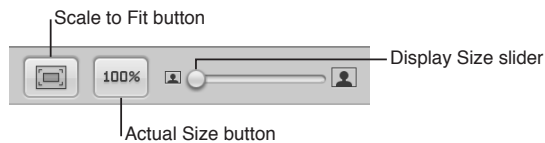
To display pages singly or side by side

- Click the Show Single Pages or Show Full Spreads button.

Note: Printing single- or double-sided pages is a function of your printer and the options available in the printer's Print dialog. If you're purchasing printed books from the Apple print vendor, your book is automatically printed double-sided.

Resizing the Page View

You can reduce or enlarge the view of your book pages in the Book Layout Editor. For example, you might enlarge the display of your pages to closely inspect details, or reduce the view to get an overview of the general page composition.



To reduce or enlarge the display of your pages

- Drag the Display Size slider left or right to change your view.

To return your page view to a size that fits within the Book Layout Editor

- Click the Scale to Fit button.

To change the page view to show the actual size of the page

- Click the Actual Size button.

Placing Photos in a Book

Placing Photos Manually

After you have created a book album with photos and chosen a theme, it's time to place photos on the book's pages.

You can place photos in a book manually by dragging them into the Book Layout Editor one at a time.

To add photos to the book manually

- Drag a photo from the Browser to a photo box on the page.

Placing Photos Automatically

Using the Autoflow feature, you can have Aperture automatically place your photos in a book. It's a good idea to set up the page structure of your document first by creating the number of pages needed and assigning master page layouts. Then arrange your photos in the Browser in the order in which they should appear in the book and let Aperture place the photos into the structure you created.

You can place all of the unplaced photos in your book at once, or you can select specific photos and have Aperture distribute them into any empty pages. For example, you might select several photos and have Aperture place them into the first several pages of your book, and then select several more photos and have Aperture place them on the following pages.

If you prefer, you can have Aperture create as many pages as necessary to hold all of your photos and place them on the pages. Aperture creates new pages using master page designs from the selected theme and fills those pages with your photos. You can then change the master page assignments if you wish.

To have Aperture "autoflow" unplaced photos

When you create a structure of pages to hold your photos, Aperture can distribute unplaced photos into the pages of the book. If more pages are required to hold your photos, Aperture creates additional pages. If you've already placed some photos on pages in the book, Aperture distributes photos beginning with the first empty photo box.

- Choose Autoflow Unplaced Images from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

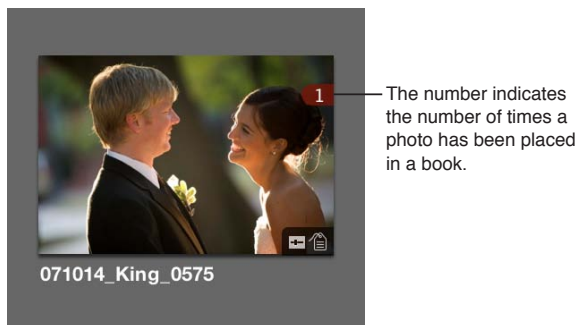
To have Aperture “autoflow” selected photos

You can select photos in the Browser and have Aperture distribute them into the current page structure of the book, starting with the first empty photo box. For example, you can select two photos in the Browser and have Aperture place them into the first two empty photo boxes of your book. You can thus place photos into a document’s page structure little by little as you go. If you select more photos than your current page structure can hold, Aperture creates new pages as necessary.

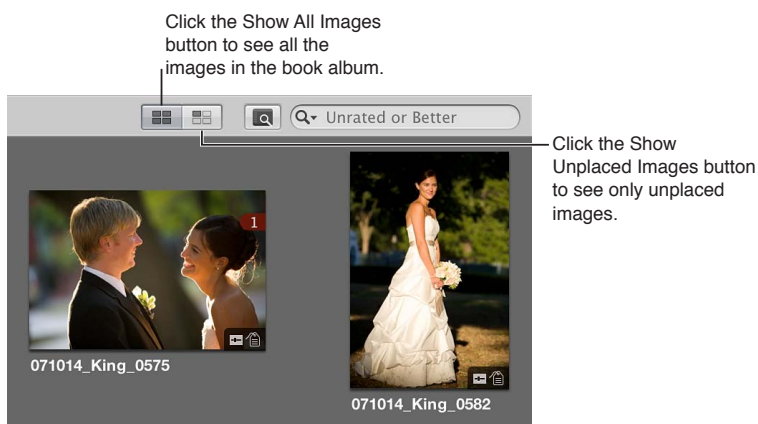
- In the Browser, select the photos you want to place in the book.
- Choose Autoflow Selected Images from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

Viewing Photos to Be Placed in a Book

After a photo is placed in the book, its Browser thumbnail is marked with a number to show how many times the photo appears on the pages of the book.



In a long book with many photos, it can at times be difficult to know which photos have been placed in a book. To help you work efficiently, you can click the Show Unplaced Images button to see only the photos that remain unplaced.



To display only unplaced photos in the Browser

- Click the Show Unplaced Images button.

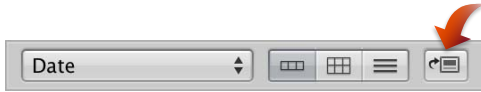
To display all of an album’s photos in the Browser

- Click the Show All Images button.

To display a selection of photos in a book album in a standard Viewer

To inspect selected photos in detail, you can display them in the Viewer. When the Book Layout Editor is open, the Browser provides a button for quickly switching to a standard Viewer.

- 1 Select the photos in the Browser.
- 2 Click the Show Viewer button.



The Book Layout Editor is replaced by the Viewer, allowing you to view the photos in detail and perform image adjustments. To return to the Book Layout Editor, click the Show Viewer button again.

Note: You can't select and use the Lift, Stamp, Rotate, and adjustment tools in the tool strip when using the Book Layout Editor. To use these tools to make a change to a photo in your book, select the photo in the Browser, then click the Show Viewer button. The selected photo appears in the Viewer where you can make image adjustments. Click the Show Viewer button again to return to the Book Layout Editor.

Adding and Removing Pages

Adding Individual Pages to a Book

When you create a book album, Aperture automatically sets up default pages laid out in the Book Layout Editor. You can select and change these pages to suit your book's requirements, and you can add and remove pages as needed. You can insert new blank pages wherever you like. After adding pages, you can drag them in the Pages pane to new locations in the book.

The most basic way to build a book is to create new pages one by one, adding them to the book as you go.



To add a single page to a book

- 1 In the Book Layout Editor, select a page in the Pages pane.

The new page you are about to create will appear just after the selected page.

- 2 Choose Add New Page from the Add Pages pop-up menu.

The new page appears in the Pages pane just after the selected page.

- 3 With the page selected in the Pages pane, choose a master page from the Set Master Page pop-up menu.

The layout is applied to the new page.

To duplicate a single page in a book

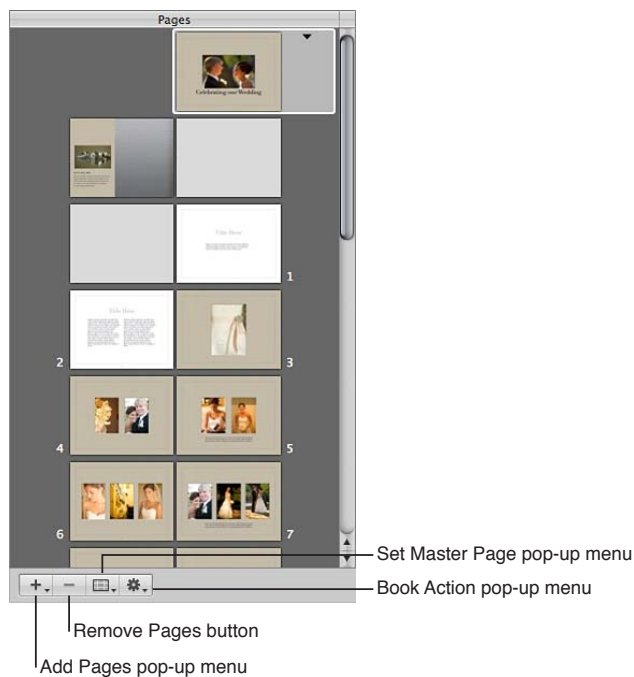
Do one of the following:

- Select a page in the Pages pane where the new page should appear, then choose Edit > Duplicate.
- Select a page in the Pages pane, then choose Duplicate Page from the Add Pages pop-up menu.

A new page appears in the Pages pane with the same page layout as the one you selected.

Automatically Creating New Pages

Aperture can automatically add pages to a book to accommodate the unplaced photos in the Browser. Aperture creates the number of pages needed to hold the remaining unplaced photos.



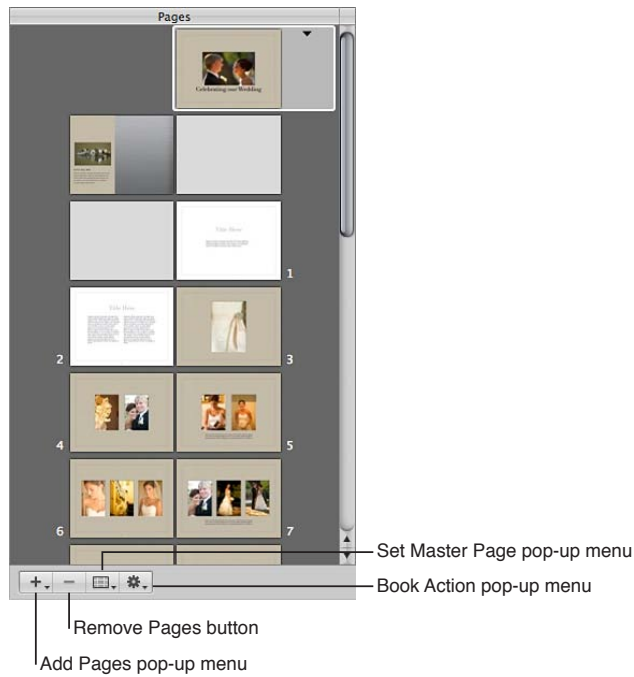
To distribute unplaced photos in pages created automatically by Aperture

- 1 Arrange the book album's photos in the Browser in the order in which you want them to appear in the book.
- 2 In the Book Layout Editor, select a page in the Pages pane.
The new pages will appear just after the selected page.
- 3 Choose Add New Pages > With Unplaced Images from the Add Pages pop-up menu.

All of the unplaced photos in the album are added to new pages in the book.

Adding New Pages to Hold a Selection of Photos

You can also select a group of photos and Aperture can automatically place them on new pages in a book. Aperture creates the number of pages needed to hold the selected photos.

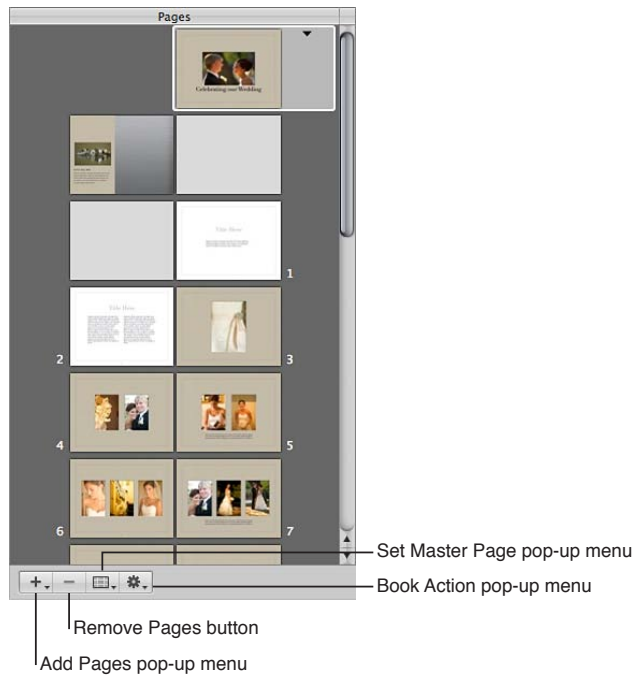


To add a selection of photos to new pages in a book

- 1 In the Browser, select the photos in the book album that you want add to the book.
- 2 In the Book Layout Editor, select a page in the Pages pane.
The new pages will appear just after the selected page.
- 3 Choose Add New Pages > With Selected Images from the Add Pages pop-up menu.
The selected photos are added to a book.

Adding New Pages Based on a Master Page

You can add pages that are based on a specific master page.



To add a new page that is based on a master page

- 1 To show master pages, choose Show Master Pages from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.
- 2 Select a page in the Pages pane.
The new page will appear just after the selected page.
- 3 Select a master page in the Master Pages pane.
- 4 Choose Add New Page From Master from the Add Pages pop-up menu.

To add pages based on a master page and have Aperture fill them with unplaced photos

- 1 To show master pages, choose Show Master Pages from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.
- 2 Select a master page in the Master Pages pane.
- 3 Choose Add New Pages From Master > With Unplaced Images from the Add Pages pop-up menu.

Aperture adds the unplaced photos to new pages and places them at the end of your book. All the new pages are based on the selected master page. If you do not want the new pages to appear at the end of the book, drag them to the position in the book that you prefer in the Pages pane. For more information, see [Reordering Pages in a Book](#) on page 531.

To add pages based on a master page and have Aperture fill them with a selection of photos

- 1 To show master pages, choose Show Master Pages from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.
- 2 Select a master page in the Master Pages pane.
- 3 Select the photos you want in the Browser.

- 4 Choose Add New Pages From Master > With Selected Images from the Add Pages pop-up menu.

Aperture adds the selected photos to new pages and places them at the end of your book. All the new pages are based on the selected master page. If you do not want the new pages to appear at the end of the book, drag them to the position in the book that you prefer in the Pages pane. For more information, see [Reordering Pages in a Book](#) on page 531.

Tip: If you no longer need to see the Master Pages pane, choose Hide Master Pages from the Book Action pop-up menu (with a gear icon).

Adding a Photo Index to a Book

You can add index pages to a book that show thumbnails of all the book's photos. Depending on the theme you choose, Aperture provides different looks and layouts for photo indexes. You can also add an index of photo metadata to your book. Typically, the photo index appears at the end of a book or at its beginning.

Note: Not all themes support photo indexes. For more information about switching themes, see [Choosing a Theme](#) on page 521.

To add an index page to the end of your book

- 1 To show master pages, choose Show Master Pages from the Book Action pop-up menu (with a gear icon).
- 2 Select an index master page in the Master Pages pane.
Note: The selected theme must support index pages.
- 3 Choose Add New Page From Master from the Add Pages pop-up menu.
Add as many index pages as your book needs to hold all the photos.
- 4 Drag photos to the photo boxes to fill the index pages at the end of your book.

If you want the index pages to appear in a different position in your book, drag them in the Pages pane.

To add a metadata index to your book

- Choose Create Index from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

Aperture adds metadata index pages to the end of your book and updates the index with the metadata information from your photos. You can change the metadata that appears in the index by selecting metadata boxes and changing the metadata format using the Set Metadata Format pop-up menu.



Removing Pages from a Book

You can remove pages from a book. Removing pages removes the contents of the page, and remaining pages simply reflow to fill the deletion. You cannot remove the cover page of a book.

To remove pages from a book

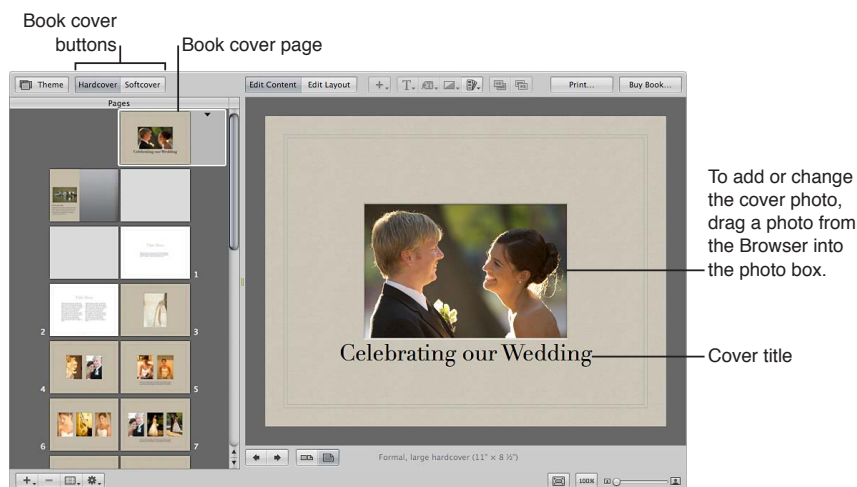
- 1 Select the page or pages you want to remove in the Pages pane of the Book Layout Editor.
You can Shift-click pages to select multiple pages.
- 2 Click the Remove Pages button (or press the Delete key), then confirm that you want to delete the page or pages.

Working with Pages

Creating a Cover for Your Book

When you create a new book album, Aperture automatically creates a front cover page for the book. You can select the page and add a title, cover photo or design, and other text or photos that you like.

You can also choose between a softcover or hardcover design. Softcover designs have a white background; if you select a hardcover design and purchase printed copies of the book from the Apple print vendor, you can choose from a selection of hardcover colors. Note that you can only add photos and text to the front cover of your book; you can't specify photos or text on the spine or back cover when purchasing books from the Apple print vendor.



To choose whether your book has a softcover or hardcover design, you click one of the book cover buttons.

To select a hardcover or softcover design for your book

- Click the Hardcover or Softcover button in the Book Layout Editor.

If you don't plan to purchase printed books from the Apple print vendor, you may want to employ a graphic designer to create the front and back cover for you, or you can design the cover yourself using a graphics application.

Choosing a Master Page Layout

You select a design for your page by applying a master page layout. Aperture provides different master page layouts depending on the theme you choose. You choose a page design from the Set Master Page pop-up menu. For example, you might create a single-photo page and then later decide to change that page to hold two photos.

You can apply different master page designs to a page to find the design that works best for your project.

To apply a master page design to a page

- 1 Select the page in the Pages pane of the Book Layout Editor.
- 2 Do one of the following:
 - Choose a master page from the Set Master Page pop-up menu.
 - Click the disclosure triangle on the page, then choose a master page from the pop-up menu.

To reapply a master page design to a page

If you change a page's design by repositioning or resizing boxes and you want to start over with the original design, you can reapply the original master page design.

- 1 Select the page you want to change in the Pages pane of the Book Layout Editor.
- 2 Choose Reapply Master from the Book Action pop-up menu (with a gear icon).

Copying Pages

If you've made changes to a page and you want to use that page again in your book, you can duplicate it. Or, you might duplicate a page and then make small modifications to it, keeping both the new page design and the original for later use.

To copy pages

- 1 In the Pages pane of the Book Layout Editor, select the page or pages you want to duplicate.
You can Shift-click pages in the Pages pane to select multiple pages.
- 2 Do one of the following:
 - Choose Edit > Duplicate.
 - Choose Duplicate Page from the Add Pages pop-up menu.

Reordering Pages in a Book

You can move pages within a book. If you need to move a particular page forward or backward in the page order, you can drag it to a new location in the book structure.

To move a page in your book

- 1 Select the page in the Pages pane of the Book Layout Editor.
- 2 Drag the page to a new location.

Choosing a Background Image

You can choose a background image to appear behind the other photos on a page. For example, you might create a page that shows a bride and groom in the foreground and a church setting in the background. Or, you might choose a background image that complements the colors of the photo in the foreground.

To choose a background image for a page

- 1 Select the page in the Pages pane of the Book Layout Editor.
- 2 Drag a photo from the Browser over the page in the Book Layout Editor until the background becomes highlighted, then release the mouse button.

To apply a background image to a two-page spread

- 1 Make sure the Show Full Spreads button is selected in the Book Layout Editor.
- 2 In the Pages pane, select one of the pages to which you want to apply the background.
- 3 Drag the photo you want over the spine (center) of the page spread in the Book Layout Editor until the background becomes highlighted on both pages.

To remove a background image

- 1 Select the page in the Pages pane of the Book Layout Editor.
- 2 Do one of the following:
 - Click the page background to select the image, then press the Delete key to remove the image.
 - Choose No Background from the Set Background pop-up menu.



Note: The Set Background pop-up menu is not available for all themes.

Using Page Numbers in a Book

Aperture provides automatic page numbering in your books. Each theme offers page numbers in preset positions on the page. You can turn off page numbering if you wish. You cannot reposition page numbers on the page or change the format of the page numbers.

To turn on page numbering

- Choose Page Numbers > Always from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

You can also choose the Automatic option to turn on page numbering. When chosen, the Automatic option displays page numbers on pages when no photos appear behind them.

To turn off page numbering

- Choose Page Numbers > Off from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

Rebuilding a Book

If you've made modifications to the design of a book and you want to start over with an unmodified design, Aperture can rebuild your book. Aperture rebuilds the book structure using the default series of master page designs and adds your photos to the revised pages. You lose any changes that you previously made to your pages. Aperture can place all the photos in the Browser into the book, or only selected photos.

To rebuild a book with all of the photos in the Browser

- Choose Rebuild Book With All Images from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

To rebuild a book with a selection of photos

- 1 In the Browser, select the photos you want to place in the book.
- 2 Choose Rebuild Book With Selected Images from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

Working with Photos

Adding Photo Boxes to a Book Page

After creating a page and applying a master page design, you may need to add more photo boxes to hold photos on the page. You can select a different master page design that has more photo boxes, or you can add photo boxes where you need them.

To add a photo box to a page

- 1 In the Book Layout Editor, click the Edit Layout button, if it's not already selected.
- 2 Select a page in the Pages pane.
- 3 Choose Add Photo Box from the Add Box pop-up menu.

When the photo box appears, you can drag it to a new position and resize it.

Changing How a Photo Fills a Photo Box

Aperture is preset to scale photos to fill a photo box on a book page. You can change the position of a photo within a photo box, making it appear centered or aligned on the right or left edge. You can also adjust the scaling of a photo within a box. If a photo is scaled so that only part of the photo is visible within the photo box, you can change the portion of the photo that's visible.

To change the position of a photo in a photo box

- 1 In the Book Layout Editor, click the Edit Layout button, if it's not already selected.
- 2 Select the photo box you want to change.
- 3 Choose Photo Box Alignment from the Book Action pop-up menu (with a gear icon), then choose an alignment option from the submenu.
 - *To scale the photo to fit the size of the box on the page:* Choose Scale to Fill.
 - *To center the photo in the box:* Choose Scale to Fit Centered.
 - *To align the photo on the left edge of the box:* Choose Scale to Fit Left-Aligned.
 - *To align the photo on the right edge of the box:* Choose Scale to Fit Right-Aligned.

To change the scale of a photo in a photo box

- 1 Double-click the photo.

The Image Scale HUD appears.

- 2 Drag the slider to adjust the size of the photo within the photo box.

Click outside the photo box to hide the Image Scale HUD.

To change the part of the photo that appears in a photo box

- 1 Double-click the photo.

The Image Scale HUD appears.

- 2 Drag the photo to change the part that's visible within the box.

Changing the Aspect Ratio of a Photo Box

Book pages hold photo boxes with specific sizes and aspect ratios. You can select a photo box and change the aspect ratio to fit the photo. For example, you can change a photo box with a landscape orientation to one with a portrait orientation.

Aperture provides commands for creating photo boxes with the following aspect ratios:

- 4:3 landscape
- 3:2 landscape
- 2:3 portrait
- 3:4 portrait
- Square
- The aspect ratio of the current photo

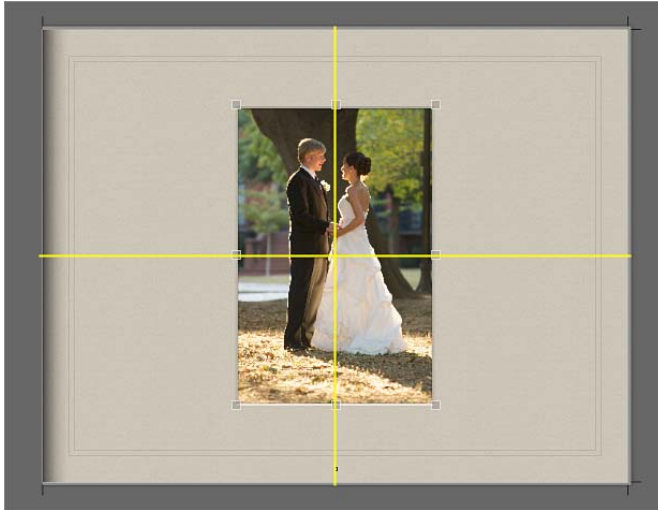
To change the aspect ratio of a photo box

- 1 In the Book Layout Editor, click the Edit Layout button, if it's not already selected.
- 2 Select the photo box you want to change.
- 3 Choose Photo Box Aspect Ratio from the Book Action pop-up menu (with a gear icon), then choose an aspect ratio from the submenu.
 - *To change a photo box to a 4:3 landscape aspect ratio:* Choose Landscape 4:3.
 - *To change a photo box to a 3:2 landscape aspect ratio:* Choose Landscape 3:2.
 - *To change a photo box to a 2:3 portrait aspect ratio:* Choose Portrait 2:3.
 - *To change a photo box to a 3:4 portrait aspect ratio:* Choose Portrait 3:4.
 - *To change a photo box to a square aspect ratio:* Choose Square.
 - *To create a photo box that fits the cropping of the current photo in the box:* Choose Photo Aspect Ratio.

Arranging Photos on the Page

You can resize and reposition photo boxes on a book page. First click the Edit Layout button; you can then click photo boxes to select them. Once selected, photo boxes show handles that you can drag to resize the box. You can also drag the content of the box to move the photo box to a new position.

As you drag a photo box, yellow guidelines appear that mark the important margins and image borders on your page. Using the guidelines, you can make sure that your photo boxes correctly align with other boxes on your pages.



To arrange photo boxes on the page

- 1 In the Book Layout Editor, click the Edit Layout button, if it's not already selected.
- 2 Select the photo box you want to move or resize.
- 3 Drag the photo box to a new location, or drag a handle on the selected box to change the photo's size.

Copying, Pasting, Cutting, and Removing Photos from Photo Boxes

After you place photos in photo boxes on your book pages, you can select a box or group of boxes and copy and paste the contents, or cut or remove the photos from photo boxes.

To copy and paste the contents of selected photo boxes

- 1 In the Book Layout Editor, click the Edit Content button, if it's not already selected.
- 2 Select the photo box or boxes whose contents you want to copy.
- 3 Choose Edit > Copy Content.
- 4 Select the photo box or boxes where you want the copied contents to appear.
- 5 Choose Edit > Paste Content.

To copy selected photo boxes

- 1 In the Book Layout Editor, click the Edit Layout button, if it's not already selected.
- 2 Select the box or boxes you want to copy.
- 3 Choose Edit > Copy.
- 4 Select the page where you want the copied photo box or boxes to appear.
- 5 Choose Edit > Paste.

To cut the contents of selected photo boxes, placing the contents in the Clipboard

- 1 In the Book Layout Editor, click the Edit Content button, if it's not already selected.
- 2 Select the photo box or boxes whose contents you want to cut.
- 3 Choose Edit > Cut Content.

To remove the contents of selected photo boxes without saving them in the Clipboard

- 1 In the Book Layout Editor, click the Edit Content button, if it's not already selected.
- 2 Select the photo box or boxes whose contents you want to remove.
- 3 Press the Delete key.

Stacking Photo Boxes in a Specific Order

As you arrange photo boxes on a book page, perhaps overlapping them to create a certain look, you may want to change their stacking order. For example, you might want to place three photos on top of one another in a specific order. To change the stacking order of photo boxes, you select a photo box and then click the Bring Forward or Send Backward button.



To change the order of a stack of photo boxes

- 1 In the Book Layout Editor, click the Edit Layout button, if it's not already selected.
- 2 Select the photo box whose stacking order you want to change.
- 3 Do one of the following:
 - Click the Bring Forward or Send Backward button.
 - Choose Arrange from the Book Action pop-up menu (with a gear icon), then choose an option from the submenu.

Removing Photo Boxes

After creating a book page and applying a master page design, you may want to remove one or more photo boxes from the page. You can choose a different master page design that has fewer photo boxes, or you can manually remove photo boxes from the page.

To remove photo boxes from a page

- Click the Edit Layout button, select a photo box or boxes, then choose Edit > Cut (or press Delete).

Changing the Look of Photos with Filters

Aperture allows you to change the look of photos in books by applying filters. For example, you might apply a filter that fades a photo so that you can position text over it to create an interesting cover. You can also apply filters that change a photo to black and white or sepia.



To apply a filter to a photo box

- 1 Select the photo box that contains the photo you want to change.
- 2 Choose the filter style you want from the Set Photo Filter pop-up menu.

Note: When you apply a filter to a photo in a book and then examine the photo with the Loupe, the photo appears without the filter effect. The filter is applied only to the photo in the book, not to the photo version. The Loupe displays the photo version.

Adding Map Boxes to a Book Page

If you've added location information to your photos using Places, you can add a map to a book page showing the locations where the surrounding photos were shot. In addition, you can define a route between locations to illustrate the journey between destinations.

Note: The Map box feature is available only in certain book themes. For more information about book themes, see [Choosing a Theme](#) on page 521.

To add a map box to a page

- 1 In the Book Layout Editor, click the Edit Layout button, if it's not already selected.
- 2 Select a page in the Pages pane.
- 3 Choose Add Map Box from the Add Box pop-up menu.



When the map box appears on the selected page in the Book Layout Editor, you can drag it to a new position and resize it. Locations assigned to photos in photo boxes surrounding the map box are automatically plotted on the map.

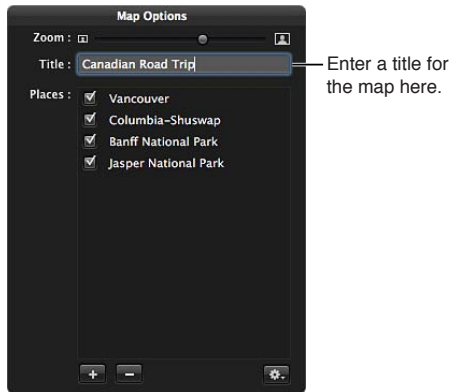
To give the map a title

You can give the map a title that appears over the bottom-left portion of the map.

- 1 In the Book Layout Editor, double-click the map.

The Map Options HUD appears.

- 2 In the Map Options HUD, enter a title for the map in the Title field at the top of the HUD.



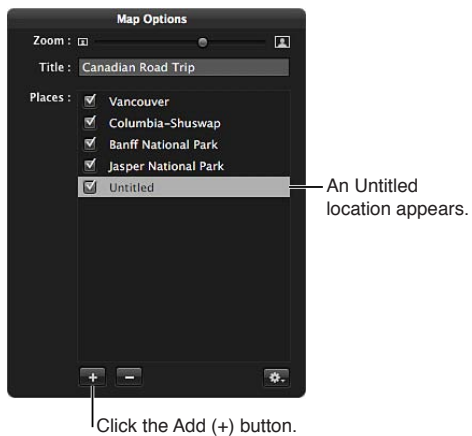
A title appears over the bottom-left portion of the map in the Book Layout Editor.

To add a location to the map

By default, the map automatically displays the locations where the photos that surround it were captured, provided they have location information assigned to them. However, you can also add and remove locations that appear on the map using the Map Options HUD.

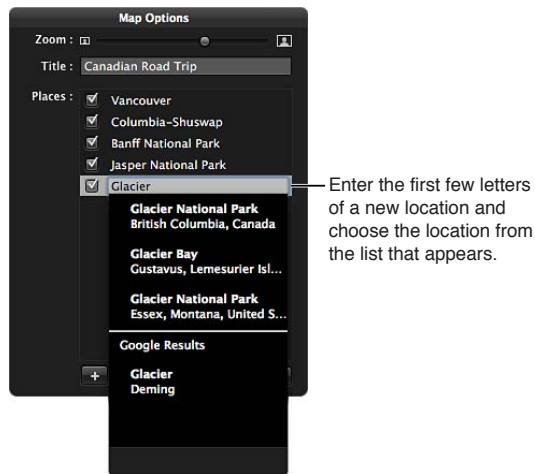
- 1 If necessary, double-click the map in the Book Layout Editor.
- 2 In the Map Options HUD, click the Add (+) button.

A new, untitled location appears.



- 3 Click the Untitled location and enter a location that you would like to appear on the map.

A list of locations appears below.

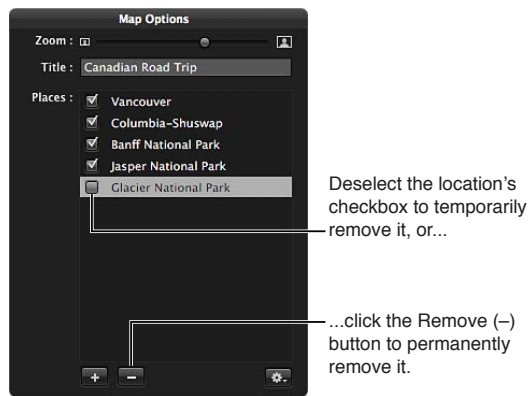


- 4 Choose the location from the list.

The new location appears on the map in the Book Layout Editor.

To remove a location from the map

- 1 If necessary, double-click the map in the Book Layout Editor.
- 2 In the Map Options HUD, do one of the following:
 - *To temporarily remove a location from the map:* Deselect the checkbox next to the location's name.
 - *To permanently remove a location from the map:* Select the location's name, then click the Remove (-) button.



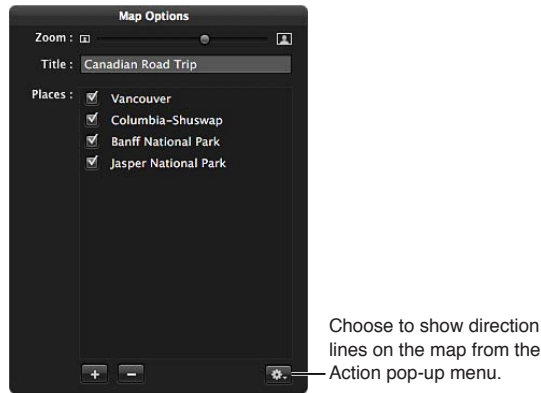
The location is removed from the map.

To show direction lines between locations on the map

You can show direction lines between locations on the map to illustrate the progression of your journey from place to place in your photo essay.

- 1 If necessary, double-click the map in the Book Layout Editor.
- 2 In the Map Options HUD, choose one of the following options from the Action pop-up menu (with a gear icon):
 - *To show a simple set of lines connecting the locations on the map:* Choose Show Straight Lines.

- To show curved lines with arrowheads indicating the direction of movement from one place to another: Choose Show Lines with Arrowheads.

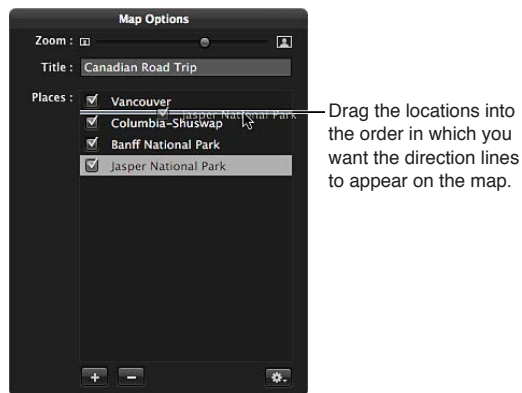


The direction lines appear on the map.

To set the path of the direction lines in the map

When you show direction lines on the map, they may not initially connect locations in a way that matches the route you intended. You set the path of the direction lines by rearranging the order of the locations in the Map Options HUD.

- 1 If necessary, double-click the map in the Book Layout Editor.
- 2 In the Map Options HUD, drag the locations into the order in which you want the direction lines to appear on the map, from top to bottom.



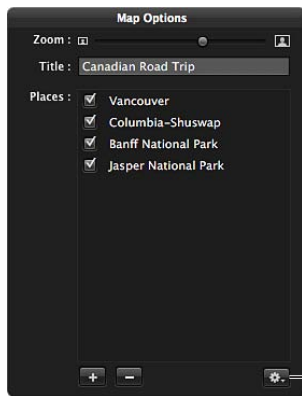
- 3 If you want the last location on the map connected to the first location on the map, choose Return to Starting Place from the Map Options HUD Action pop-up menu (with a gear icon).

The direction lines on the map are updated to match the order of locations in the Map Options HUD.

To choose the area shown in the map

You can specify which part of the map is visible on the page by zooming in to and out of the map and repositioning the map. If you've repositioned the map and the photo locations are off-center or no longer appear, you can return the map to a position centered on the photo locations.

- 1 If necessary, double-click the map in the Book Layout Editor.
- 2 In the Map Options HUD, do any of the following:
 - *To zoom in to and out of the map:* Drag the Zoom slider (at the top of the HUD) to the right to zoom in and to the left to zoom out.
 - *To reposition the map to show other locations:* Drag the map to reposition it.
 - *To center the map on the photo locations:* Choose Center Map on Places from the Map Options HUD Action pop-up menu (with a gear icon).



Choose to center the map direction lines using the Action pop-up menu.

Working with Text

Placing Text on the Page

As you work with your book layout, you can add text and position it on the page. You can make text changes to individual pages in your book, or you can change master pages to create template pages with custom text styles and layouts.

Master page designs provide text boxes that you can select and enter text in. You can also copy text and paste it into text boxes on your book pages.

To add text to a text box

- 1 In the Book Layout Editor, click the Edit Content button, if it's not already selected.



- 2 In the Pages pane, select the page you want to work on.
- 3 Select the text box you want to change.
- 4 Select any existing text and type or paste the new text.

Adding Text Boxes to a Page

When you want to add text to a book page and need another text box, you can add one and position it anywhere on the page.

To add a text box to a page

- 1 In the Pages pane of the Book Layout Editor, select the page to which you want to add text.
- 2 Click the Edit Layout button.



- 3 Choose Add Text Box from the Add Box pop-up menu.



A new text box appears on the page.

- 4 Drag the text box to the location where you want it to appear.

You can resize a text box by dragging its resize handles.

Adding Metadata Boxes to a Page

You can display photos on a book page along with any metadata associated with them. To display a photo's metadata, you add a metadata box to the page and link it to the photo. You can also unlink a metadata box from its selected photo and relink it when necessary.

To add a metadata box to a page

- 1 In the Pages pane of the Book Layout Editor, select the page to which you want to add the metadata box.
- 2 Click the Edit Layout button.
- 3 Select the photo box to which you want to add a metadata box.
- 4 Choose Add Metadata Box from the Add Box pop-up menu.



A new metadata box appears on the page.

- 5 Drag the metadata box to the location where you want it to appear.

You can resize a metadata box by dragging its resize handles.

- 6 Choose the type of metadata you want displayed in the box from the Set Metadata Format pop-up menu.



To unlink a metadata box

- 1 In the Pages pane of the Book Layout Editor, select the page that has a metadata box you want to unlink.
- 2 Select the metadata box.
- 3 Choose Unlink Metadata Box from the Book Action pop-up menu (with a gear icon).

To relink a metadata box

- 1 In the Pages pane of the Book Layout Editor, select the page that has the metadata box you want to link.
- 2 Command-click the metadata box and the photo box you want to link to select them both.
- 3 Choose Link Metadata Box from the Book Action pop-up menu (with a gear icon).

Hiding or Showing Photo Plate Numbers in Books

You can turn the display of plate numbers in your books and web galleries on or off. Aperture is preset not to display plate numbers for photos.

To turn on the display of plate numbers in a book

- In the Book Layout Editor, choose Enable Plate Metadata from the Book Action pop-up menu (with a gear icon).

Choosing a Text Style

You can assign text styles to text and metadata boxes to change the look of text in your book. Aperture master pages come with preset text styles that include designs for important text elements such as cover text, subtitles, headings, and paragraph text. You can easily apply these styles to text and metadata boxes as you work.

To change the text style of a text or metadata box

- 1 Select the text or metadata box you want to change.
- 2 Choose a text style for your text from the Set Text Style pop-up menu.



Making Font Changes in Books

Aperture provides a Fonts window that you can use to change fonts in your books. You select text in a text box on a page to change the font, font size, font color, and more.

Important: Aperture follows the text-smoothing preferences set in the Appearance pane of System Preferences. The OS X default setting doesn't smooth fonts that are 8 points in size or smaller. This setting only affects the appearance of fonts onscreen; the fonts appear smoothed when printed.

To show the Fonts window

Do one of the following:

- Select a text box, then choose Edit > Show Fonts (or press Command-T).
- Control-click the text box, then choose Font > Show Fonts from the shortcut menu.

Arranging Text on the Page

You can resize and reposition text and metadata boxes on a book page. First click the Edit Layout button; then click boxes to select them. Selected boxes display handles that you drag to resize the boxes. You can also drag the contents of a box to move the box to a new position.

To arrange text on a page

- 1 In the Book Layout Editor, click the Edit Layout button, if it's not already selected.
- 2 In the Pages pane, select the page you want to work on.
- 3 Select the text box on the page that you want to move or resize.
- 4 Drag the box to a new location, or drag a handle on the selected box to change the box's size.

Changing the Number of Text Columns

You can change a text box on a book page so that it's formatted to hold from one to four columns of text.

To change the number of text columns in a text box

- 1 In the Book Layout Editor, click the Edit Layout button, if it's not already selected.
- 2 Select the text box.
- 3 Choose Text Box Columns from the Book Action pop-up menu (with a gear icon), then choose the number of columns from the submenu.
- 4 If necessary, resize the text box to better accommodate the changed column layout of the box.

Removing Text Boxes from a Page

After creating a book page and applying a master page design, you may want to remove one or more text boxes from the page. You can choose a different master page design that has fewer text boxes, or you can manually select and remove text boxes.

To remove text or metadata boxes from a page

- 1 In the Book Layout Editor, click the Edit Layout button.
- 2 Select the text or metadata box that you want to remove, then choose Edit > Cut Content (or press Delete).

Working with the Layout Options Inspector

You can select an item on a book page and view its geometry using the Layout Options inspector. Some printers require precise layout dimensions; you can use the Layout Options inspector to accurately place all items on the page by specifying new dimensions using the value sliders. In addition, you can change the angle of text and photo boxes, as well as apply a color border to a photo box.



To open the Layout Options inspector

- Choose Show Layout Options from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

The Layout Options inspector appears at the top-left area of the Book Layout Editor.

To change the dimensions of a text or photo box

- 1 Select a text box or photo box on a book page displayed in the Book Layout Editor.
- 2 Do any of the following:
 - *To move the selected item left or right:* Specify a new value using the X value slider.
 - *To move the selected item up or down:* Specify a new value using the Y value slider.
 - *To change the width of the selected item:* Specify a new value using the Width value slider.
 - *To change the height of the selected item:* Specify a new value using the Height value slider.

To change the angle of a text or photo box

- 1 Select a text box or photo box on a book page displayed in the Book Layout Editor.
- 2 Specify an angle value using the Angle value slider.

The photo rotates counterclockwise as the value increases. Decrease the value to rotate the photo clockwise.

To add a border to a photo box

- 1 Select a photo box on a book page displayed in the Book Layout Editor.
- 2 Set the width of the border by specifying a value using the Thickness value slider.
- 3 Set the color of the border by clicking in the Color well and then choosing a color in the Colors window.

The border is applied to the photo.

To close the Layout Options inspector

- Choose Hide Layout Options from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

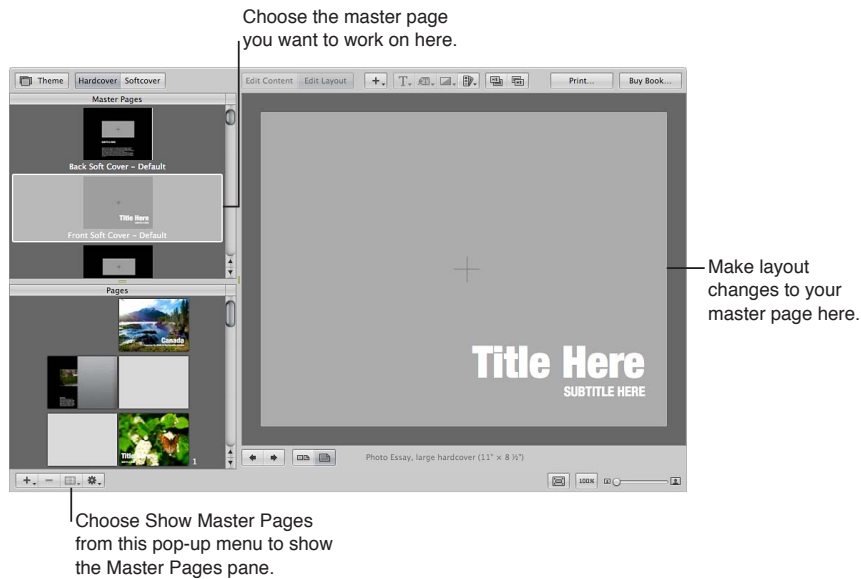
Working with Master Pages

An Overview of Master Pages

Master pages supply the initial design of your book pages. You apply master page designs repeatedly throughout a book.

If you plan to make reusable book albums, you can customize the page designs of a selected theme before creating your books. You can select a master page and modify it, changing the photo, text, and metadata boxes that appear on the page. You can also create new master pages to suit specific layout needs. To modify pages, you use the procedures for working with photo, text, and metadata boxes presented earlier in this chapter.

To modify a master page, you show master pages in the Master Pages pane and then add a new page or select the page you want to work on. When you select a master page in the Master Pages pane, the Book Layout Editor displays an enlarged view of the page.



Viewing Master Pages

To view and work on a book theme's master pages, you must show the master pages in the Master Pages pane.

To show master pages

- Choose Show Master Pages from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

The Master Pages pane appears above the Pages pane, showing thumbnails of the master pages for the selected theme. You can select master pages in the Master Pages pane to display and work on them. You can drag the border between the Master Pages pane and the Pages pane to resize the pane display.

To hide master pages

- Choose Hide Master Pages from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

Creating and Modifying Master Pages

You can create new master pages, or you can duplicate existing master pages and modify them. For example, if you decide to customize a two-photo layout from an original master page design, you can save the customized version and have multiple two-photo layouts from which you can choose. Once you create a new master page, the master page name appears in the Set Master Page pop-up menu, where you can choose it to apply the design to pages in your book.

Note: You cannot modify the master pages for cover pages.

To create a new master page design

- 1 Choose Show Master Pages from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.
- 2 Select a master page in the Master Pages pane.
- 3 Choose Add New Page from the Add Pages pop-up menu.

The new master page appears in the Master Pages pane underneath the page you selected in step 2.

- 4 If you want to rename the page, double-click its title and type a new name.
- 5 Select the new master page and make your changes.

To duplicate and modify a master page design

- 1 Choose Show Master Pages from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.
- 2 Select the master page you want to duplicate in the Master Pages pane.
- 3 Choose Duplicate Page from the Add Pages pop-up menu.

The new duplicate page appears in the Master Pages pane underneath the original page.

- 4 If you want to rename the page, double-click its title and type a new name.
- 5 Select the new master page and make your changes.

To create a new master page design from a page in your book

You can change the design of a page in your book and save the changes to create a new master page.

- 1 In the Pages pane of the Book Layout Editor, select the page whose modifications you want to save as a master page.
- 2 Choose Save Page > As New Document Master from the Book Action pop-up menu (with a gear icon).
- 3 Choose Show Master Pages from the Book Action pop-up menu, if necessary, to show the Master Pages pane.
- 4 Select the new master page in the Master Pages pane and rename it.

To save changes in a book page to the original master page design

After updating the design of a page in your book, you can update the original master page with those changes.

- 1 In the Pages pane of the Book Layout Editor, select the page whose design you modified.
- 2 Choose Save Page > To Document Master from the Book Action pop-up menu (with a gear icon).
Aperture updates the original master page with your design changes.

Unifying and Splitting Master Pages

Some master pages have left and right versions to match the book margins on the left and right facing pages. You can select a left or right master page and consolidate the two versions into one page.

To unify left and right versions of a master page

- 1 Select a left or right master page in the Master Pages pane of the Book Layout Editor.
- 2 Choose Unify Master Page from the Book Action pop-up menu (with a gear icon).

You can also select a master page that has only one version and split it into left and right versions.

To split a master page that doesn't have left or right versions into left and right versions

- 1 Select a master page in the Master Pages pane of the Book Layout Editor.
- 2 Choose Split Master Page from the Book Action pop-up menu (with a gear icon).

You can now adjust the position of items on the new pages to match the margins on the left and right pages.

Updating Book Pages with Master Page Changes

After you change a master page, the modified design can be applied to pages in your book. Aperture does not automatically update the design of pages whose master pages are modified. However, you can choose to update the pages in a book with revised master page designs.

To update a page with a changed master page design

- 1 In the Pages pane of the Book Layout Editor, select the page whose master page design you want to update.
- 2 Choose Reapply Master from the Book Action pop-up menu (with a gear icon).

Aperture applies the current master page design to the selected page.

Creating and Sharing Custom Themes

If you need a book with dimensions different from those of the Small, Medium, and Large format books, you can create a custom theme with the precise dimensions you require. The ability to set the dimensions in a custom theme provides the precision demanded by professional printers.

To create a custom theme

- 1 In the Book Layout Editor, click the Theme button.

A dialog appears, alerting you that you may lose text when you change themes.

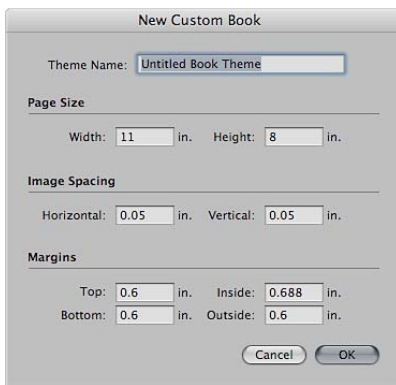
- 2 Click OK.

- 3 In the dialog that appears, choose Custom from the Book Type pop-up menu.

- 4 Click the New Theme button at the bottom of the dialog.

The New Custom Book dialog appears.

- 5 In the Theme Name field, enter a name for the custom theme.



- 6 Enter the book's dimensions in the Page Size, Image Spacing, and Margins areas, then click OK.

The new custom theme appears in the theme list.

To share custom themes with another Aperture system

You can share custom book themes with other Aperture systems. By default, Aperture saves custom themes in the following location in the Finder:

`/Users/username/Library/Application Support/Aperture3/Book Themes/`

- Copy the themes you want to share from the Book Themes folder on the first Aperture system to the same location on the other Aperture system.

The custom themes appear in the Book Themes dialog when you choose Custom from the Book Type pop-up menu.

Copying a Book Album

After you've set up a book structure that you like, you can reuse it for other book publication projects. For example, you might create a wedding album book structure that you reuse frequently.

You can select and duplicate a book album. You can then remove the photos from the album and replace them with others to fill the new book. Aperture can automatically flow the new photos into the duplicated book structure.

To copy a book album and place new photos in it

- 1 Select the book album in the Library inspector.
- 2 Choose File > Duplicate Book.
The duplicate book appears in the Library inspector.
- 3 Drag the duplicate book album to a new project, if you wish.
- 4 With the duplicate book album selected in the Library inspector, select a photo in the Browser and choose Edit > Select All (or press Command-A).
- 5 To remove the photos from the album, choose Photos > Remove From Album (or press Delete).
All the photos are removed from the Browser and the book pages.
- 6 Select the project, folder, or album that has the photos you want to place in the book.
- 7 In the Browser, select the photos and drag them to the duplicate book album in the Library inspector.
- 8 Select the duplicate book album in the Library inspector.
- 9 Arrange the photos in the Browser in the order you want them to appear in your book.
- 10 Choose Autoflow Unplaced Images from the Book Action pop-up menu (with a gear icon) in the Book Layout Editor.

The photos are automatically placed in the book pages.

Ordering Books from Third-Party Print Vendors Using Plug-ins

Some third-party print vendors supply plug-ins that allow Aperture to submit your book files with the format and settings the print vendor requires. All third-party book plug-ins provide custom themes, book dimensions, and binding options.

To use a third-party book plug-in, you must first obtain the plug-in software from the print vendor and install it. For a list of book plug-ins, go to <http://www.apple.com/aperture/resources/third-party-books.html>.

To create a book using a third-party book plug-in

- 1 Go to <http://www.apple.com/aperture/resources/third-party-books.html>, download a third-party book plug-in, and install it.
- 2 Create a book album.

For more information, see [Creating a Book Album](#) on page 519.

- 3 When entering a name for the book album and choosing a theme in the dialog that appears, choose a third-party book plug-in from the Non-Apple Books section of the Book Type pop-up menu.

Custom themes designed specifically for the third-party book plug-in appear in the theme list.

- 4 Select a theme, then click Choose Theme.
- 5 After you have finished laying out the book, click the Send Book button at the top-right corner of the Book Layout Editor.

An order pane for the third-party print vendor appears with options and pricing details.

An Overview of Sharing Your Photos Online

My Photo Stream is the iCloud service that lets you view all your recent photos on your devices without having to sync—all you have to do is turn it on. You can also create shared photo streams to share photos and comments about them with your friends. For more information, see [An Overview of My Photo Stream](#) on page 552 and [An Overview of Shared Photo Streams](#) on page 559.

Important: My Photo Stream and Shared Photo Streams can be associated with only one library at a time. When you switch libraries, Aperture prompts you to set My Photo Stream to share photos with the new library exclusively. Photos from your photo stream and shared photo streams are pushed to the new library from that point on.

You can email photos directly from Aperture. For more information, see [Emailing Photos](#) on page 567.

You can also share your photos with your Flickr and Facebook accounts from within Aperture by creating Flickr and Facebook albums. Photos placed in Flickr and Facebook albums in Aperture are automatically exported to and published in your Flickr and Facebook accounts. For more information, see [An Overview of Sharing Photos with Flickr and Facebook](#) on page 568.

Using My Photo Stream

An Overview of My Photo Stream

My Photo Stream is the iCloud service that uploads and stores the last 30 days of your photos and automatically pushes them to your iOS devices and computers.

Note: You must have an iCloud account to use My Photo Stream. iCloud requires OS X v10.7.2 or later. For more information, see [Setting Up Your iCloud Account](#) on page 554.

Here's how your photo stream works:

- First, set up My Photo Stream on any device that you want to be part of your photo stream.
- Then, take a photo with your iOS device, or import some photos from your digital camera to your Mac, iPad, or Windows computer.
- iCloud automatically uploads the photos to your photo stream, and then downloads them to your other devices (via a Wi-Fi network or Ethernet).

- The photos appear in your photo stream on each device: in the Photos app on your iOS devices, in iPhoto or Aperture on a Mac, or in the Pictures folder on a Windows computer.



My Photo Stream is totally automatic, but if you have a Mac, you can choose to turn off automatic uploading when you set up My Photo Stream in iPhoto or Aperture. This can be useful if you regularly import very large numbers of photos.

iCloud stores your new photos for 30 days so that your devices have plenty of time to connect and download the photos. Your iOS devices keep a rolling collection of your last 1000 photos, and you can save your favorite shots to your Camera Roll or any other album to keep them on your device permanently. Because your computers have more storage, they can keep all your photo stream photos.

Note: Automatic Import must be turned on in Photo Stream preferences in iPhoto or Aperture for your Mac to keep all photos (this option is turned on by default). Your Windows PC keeps all photos no matter what.

In addition to using My Photo Stream to keep your photos up to date between your devices, you can create photo streams to share photos with other people. For more information, see [An Overview of Shared Photo Streams](#) on page 559.

To get started, set up My Photo Stream on your devices.

For more information about setting up My Photo Stream on your iOS devices, see [Set up Photo Stream](#) in iCloud Help.

Note: My Photo Stream is compatible with TIFF files up to 100 MB, JPEG files up to 50 MB, RAW files (in supported formats) up to 100 MB, and PNG files up to 50 MB.

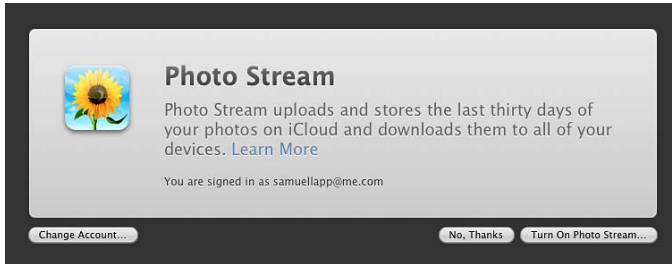
Setting Up Your iCloud Account

In order to use My Photo Stream, you must set up a free iCloud account. With an active iCloud account, you can set your Aperture library as the main repository for all your photo stream photos. You can also choose which photos you want to download from your photo stream into Aperture, as well as the specific photos in your Aperture library that you want to upload to your photo stream.

Note: You must have an Internet connection to set up an iCloud account.

To set up an iCloud account

- 1 In the Library inspector in Aperture, select Photo Stream.
- 2 Click the Turn On Photo Stream button, then click Continue in the dialog that appears.



- 3 In the iCloud pane of the System Preferences window, do one of the following:
 - Enter your Apple ID and password, then click Sign In.
Note: If you can't remember your Apple ID and password, click the "Forgot password?" link, then follow the onscreen instructions.
 - Click Create an Apple ID, then follow the onscreen instructions.



Note: For more instructions on setting up an iCloud account, see Help Center.

You can now return to Aperture to begin working with My Photo Stream.

Turning On My Photo Stream for an Aperture Library

My Photo Stream is designed to work with one Aperture or iPhoto library at a time. However, it's easy to switch the library iCloud uses to upload and download photos.

Important: If you have My Photo Stream turned on in iPhoto, turning on My Photo Stream in Aperture turns off My Photo Stream for your iPhoto library. Photos from your photo stream are no longer pushed to your iPhoto library.

To turn My Photo Stream on or off

- 1 Choose Aperture > Preferences, then click Photo Stream.
- 2 Do one of the following:
 - *To turn on My Photo Stream:* Select the My Photo Stream checkbox.
 - *To turn off My Photo Stream:* Deselect the My Photo Stream checkbox, then click Turn Off in the dialog that appears.

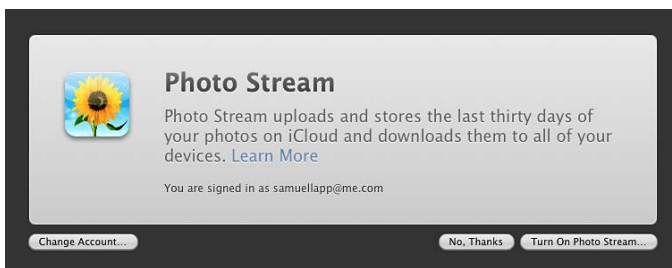


Select or deselect this checkbox to turn My Photo Stream on or off for this library.

To switch My Photo Stream to another Aperture library

- 1 Open the Aperture library you want to use with My Photo Stream.

Note: For instructions for switching Aperture libraries, see [Viewing Other Libraries](#) on page 40.
- 2 In the Web section of the Library inspector, select Photo Stream.
- 3 Click the Turn On Photo Stream button, then click Switch in the dialog that appears.



My Photo Stream is turned on for the Aperture library you switched to and is turned off for the library you switched from. New photos downloaded from your photo stream appear in the library with My Photo Stream turned on, and only photos from that library are automatically uploaded to your photo stream.

For more information about setting a library to automatically upload photos to your photo stream, see [Automatically Transferring Photos Between Aperture and Your Photo Stream](#) on page 556.

Automatically Transferring Photos Between Aperture and Your Photo Stream

When you turn on My Photo Stream for an Aperture library, Aperture is set to automatically upload photos to and download photos from your photo stream. However, you can turn these settings on and off. When Aperture is set to automatically download photos from your photo stream, new photos are imported into a project named “[Month] [Year] Photo Stream.” When Aperture is set to automatically upload photos to your photo stream, photos are uploaded as they are imported into Aperture.

Note: To transfer photos between Aperture and your photo stream, you must have an Internet connection.

To set Aperture to automatically upload photos to and download photos from your photo stream

- 1 Choose Aperture > Preferences, then click the Photo Stream button.
- 2 Select the My Photo Stream checkbox.



- 3 Do either or both of the following:
 - *To set Aperture to automatically download photos from your photo stream:* Select the Automatic Import checkbox.

Note: If you recently switched libraries or have the Automatic Import feature turned off, only new photos added to your photo stream are automatically downloaded to your Aperture library. If you want to import the existing photos in your photo stream, you must manually download them. For more information, see [Manually Transferring Photos Between Aperture and Your Photo Stream](#) on page 557.
 - *To set Aperture to automatically upload photos to your photo stream as they are imported into your Aperture library:* Select the Automatic Upload checkbox.

Photos remain in your photo stream for 30 days and are then removed automatically—unless you delete them first.

Manually Transferring Photos Between Aperture and Your Photo Stream

You can choose which photos in your Aperture library you want to upload to your photo stream. You can also manually download from your photo stream only those photos that you want to store in your Aperture library.

Note: To transfer photos between Aperture and your photo stream, you must have an Internet connection.

To manually upload photos to your photo stream

- 1 In the Library inspector, select the item containing the photos you want to upload to your photo stream.
- 2 In the Browser, select the photos you want to upload to your photo stream, then do one of the following:
 - Choose File > Share > Photo Stream.
 - Click the Photo Stream button in the toolbar.
 - Drag the photos to the Photo Stream item in the Library inspector.

The Photo Stream dialog appears.

- 3 Choose My Photo Stream from the Photo Stream pop-up menu, then click OK.

The photos are uploaded to your photo stream and immediately pushed to the iOS devices connected to your iCloud account. Photos remain in your photo stream for 30 days and are then removed automatically—unless you delete them first.

To manually download photos from your photo stream

- 1 In the Library inspector, select Photo Stream, then double-click My Photo Stream.
- 2 Select the photos you want to download from your photo stream, then drag them to a project or an album in the Library inspector.

The photos from your photo stream are downloaded to the specified project in Aperture and are permanently stored on your Mac—unless you manually delete them. For more information about deleting images in Aperture, see [Working with the Aperture Trash](#) on page 38.

About Turning On My Photo Stream on More Than One Mac

You can turn on My Photo Stream for the same iCloud account on more than one Mac. When you have My Photo Stream turned on for more than one Mac and you upload a photo to your photo stream, the event information from iPhoto or the project information and hierarchy from Aperture are included. If the receiving application has Automatic Import turned on in Photo Stream preferences, the event or project information is passed along in one of the following ways:

- *Photo uploaded from iPhoto on one Mac and pushed to iPhoto on another Mac:* If the iPhoto library the photo is pushed to contains a duplicate of the event in which the photo originated, the photo is placed in that event—even if the event has been renamed. If the same event does not appear in the iPhoto library the photo is pushed to, a new event is created and named after the photo's original event.
- *Photo uploaded from iPhoto on one Mac and pushed to Aperture on another Mac:* A new project is created in the Aperture library and named after the iPhoto event in which the photo originated.

- *Photo uploaded from Aperture on one Mac and pushed to iPhoto on another Mac:* A new event is created in the iPhoto library and named after the photo's immediate parent item in the Aperture library. For example, if the photo originated at the top level of a project named "Travel," a new Travel event is created in iPhoto. If the photo originated in an album named "Christmas 2011" that is inside another album or a project, the new iPhoto event is named after the Christmas 2011 album.
- *Photo uploaded from Aperture on one Mac and pushed to Aperture on another Mac:* If the Aperture library the photo is pushed to contains a duplicate of the project or album in which the photo originated, the photo is placed in that project or album—even if the project and any subordinate folders and albums have been renamed or restructured. If the project or its albums don't exist in the Aperture library the photo is pushed to, the project hierarchy is replicated and the photo is placed in its original position.

Note: When pushing photos to iPhoto or Aperture, iCloud downloads photos to iPhoto events and Aperture projects that have universally unique identifiers (UUIDs) matching those of the photos' original events or projects. If you manually create iPhoto events or Aperture projects with the same names as events or projects in other libraries, those events or projects are not recognized as matches. To create matching events or projects, you must copy them from one library and merge them with the other.

About Uploading RAW Files to Your Photo Stream

RAW files imported into Aperture can be uploaded to your photo stream and viewed on your iOS devices. The way the RAW file's image is uploaded to your photo stream depends on how the RAW file was imported into Aperture and whether any adjustments have been applied.

Note: When you share a RAW photo via a shared photo stream, an optimized JPEG copy is created and added to the shared photo stream. For more information, see [An Overview of Shared Photo Streams](#) on page 559.

RAW image state	How the RAW image is uploaded to your photo stream
RAW image with no adjustments applied	The RAW file is uploaded to your photo stream.
RAW image with adjustments applied	The JPEG file for the preview image is uploaded to your photo stream. For more information about preview images, see An Overview of Preview Images on page 118.
RAW + JPEG image pair	The file that is uploaded is determined by the frontmost file in the RAW + JPEG pair. For more information about RAW + JPEG pair import settings, see Importing RAW + JPEG Image Pairs on page 67.

Sharing Photo Streams

An Overview of Shared Photo Streams

Sharing a photo stream is an easy way to keep the important people in your life up to date with your latest photos. Invitees, who must have an iCloud account to join the photo stream, can view, “like,” and comment on your photos from any device set up with Photo Stream. Those invitees without an iCloud account are sent a link to a webpage to view the shared photos; however, they cannot comment on the photos.

Here’s how shared photos streams work:

- First, set up Photo Stream on any Apple device that you want to be part of your photo stream.
- Then, select a photo on your iOS device or select a photo in your Aperture or iPhoto library.
- Create a shared photo stream to share your photo with your friends.

Your friends initially receive an email inviting them to subscribe to your shared photo stream. When they accept, the stream appears on their iOS devices or within Aperture and iPhoto. All subsequent photos shared in that photo stream automatically appear on the subscribers’ Apple devices.

- You and your friends can comment on and like shared photos, as well as reply to the comments.

Your friends are alerted to new comments and photos by notifications on their iOS devices and in OS X. You are alerted to new comments from your friends, but only you can add photos to and remove photos from the streams you create.

Note: Photo stream sharing requires OS X Mountain Lion v10.8.2 or later.

Turning On Shared Photo Streams in Aperture

You can turn Shared Photo Streams on and off independently of My Photo Stream.

To turn Shared Photo Streams on and off in Aperture

- 1 Choose Aperture > Preferences, then click Photo Stream.
- 2 Do one of the following:
 - *To turn on Shared Photo Streams:* Select the Shared Photo Stream checkbox.
 - *To turn off Shared Photo Streams:* Deselect the Shared Photo Stream checkbox.



After you turn off Shared Photo Streams in Aperture, you can continue to add photos to and remove photos from your shared photo streams using your other Apple devices.

Creating a Shared Photo Stream

It's easy to create a photo stream to share your photos.

To create a shared photo stream

- 1 Select the photos you want to share, then do one of the following:
 - Choose File > Share > Photo Stream.
 - Choose Photo Stream from the Share pop-up menu in the toolbar.
- 2 In the Photo Stream dialog, choose New Photo Stream from the Photo Stream pop-up menu.
- 3 In the "Shared with" field, type the email addresses for your invitees.

To enable your invitees to access the shared photo stream from an iOS device, you must provide the email addresses associated with their iCloud accounts.
- 4 In the Name field, type a name for the photo stream.
- 5 If you want to share your photo stream with someone who doesn't have an Apple device, select the Public Website checkbox.

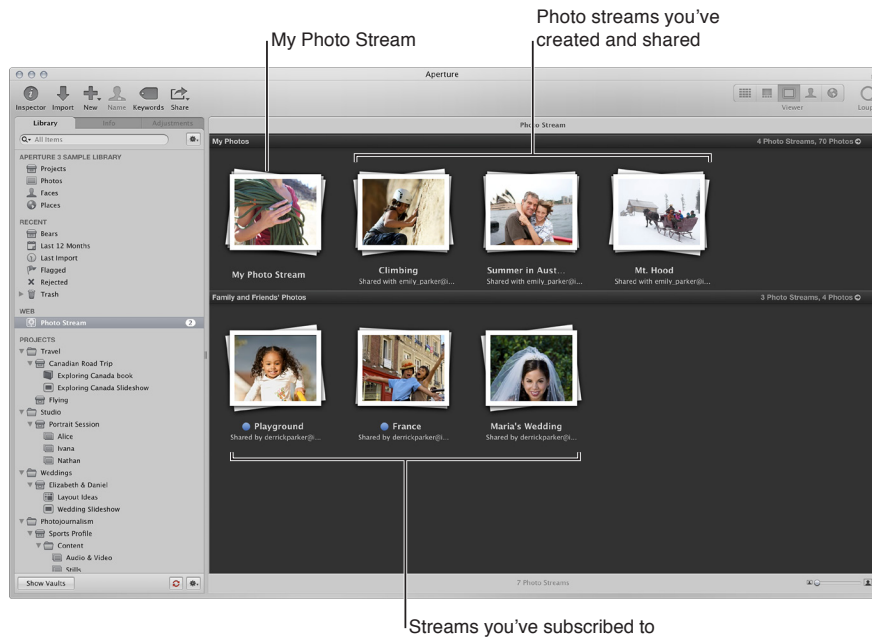
Note: People who view your shared photo stream on the web cannot comment on the photos. They also cannot view the comments posted by you or by others who subscribe to your shared photo stream with an Apple device. If you would like someone who doesn't have an Apple device to see the first comment added to a photo, you must post the comment first, before inviting the person to view the shared stream.

- 6 Click OK.

Your invitees are sent an email and a notification asking them to subscribe to your shared photo stream.

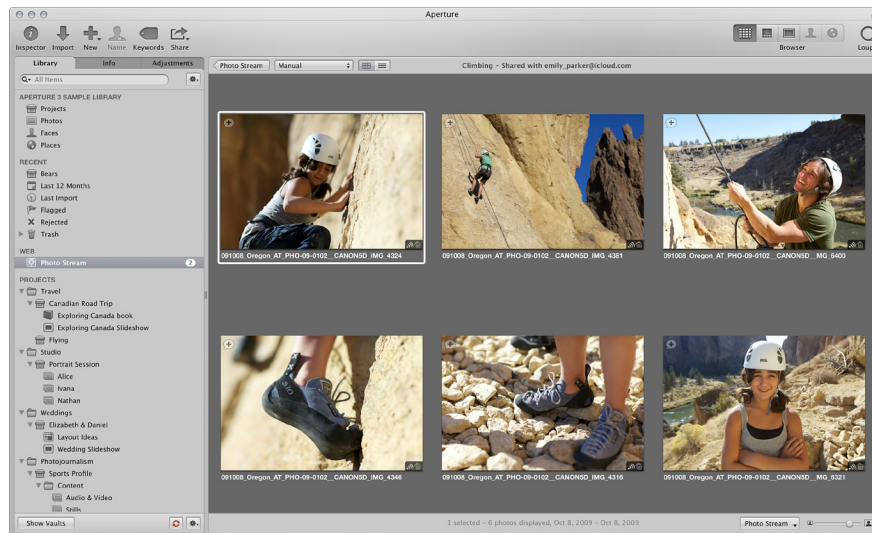
To view photos in a shared photo stream

- 1 In the Web section of the Library inspector, select Photo Stream.



Your photo stream and shared photo streams appear.

- 2 To view the contents of a photo stream, double-click its thumbnail.



To stop sharing a photo stream

If you want to stop sharing a photo stream, all you have to do is delete it.

WARNING: When you delete a shared photo stream, it's immediately removed from your subscribers' devices. If you think your subscribers might want to keep some of the photos, you should alert them to save the photos before you delete the shared photo stream.

- 1 In the Web section of the Library inspector, select Photo Stream.
- 2 Select the photo stream you want to stop sharing, then press Command-Delete.

Adding, Removing, and Editing Photos in a Shared Photo Stream

You can add and remove photos in a shared photo stream that you created. You can also update photos in a shared stream.

Note: You can add photos only to photo streams you create. You cannot add photos to shared photo streams you subscribe to.

To add photos to a shared photo stream

- 1 Select the photos you want to add to an existing photo stream, then do one of the following:
 - Choose File > Share > Photo Stream.
 - Choose Photo Stream from the Share pop-up menu in the toolbar.
- 2 In the Photo Stream dialog, choose a shared photo stream from the Photo Stream pop-up menu, then click OK.

To remove photos from a shared photo stream

- 1 In the Web section of the Library inspector, select Photo Stream.
- 2 Double-click the shared photo stream containing the photos you want to remove.
- 3 Select the photos you want to remove, then press Delete.

To replace a photo in a shared photo stream

If you share a photo in a shared photo stream and then apply image adjustments to it, the newly adjusted photo doesn't automatically appear in the shared photo stream. You can either add it to the existing photo stream along with the older version, or you can delete the older version and replace it with the updated photo.

- 1 In the Web section of the Library inspector, select Photo Stream.
- 2 Double-click the shared photo stream containing the photo you want to replace.
- 3 Select the photo you want to replace, then press Delete.
- 4 In the Library inspector, select the project containing the updated photo, then select the photo.
- 5 Choose Photo Stream from the Share pop-up menu in the toolbar.
- 6 In the Photo Stream dialog, choose the shared photo stream that contained the photo you want to replace from the Photo Stream pop-up menu, then click OK.

The updated photo with the new adjustments replaces the photo you just removed.

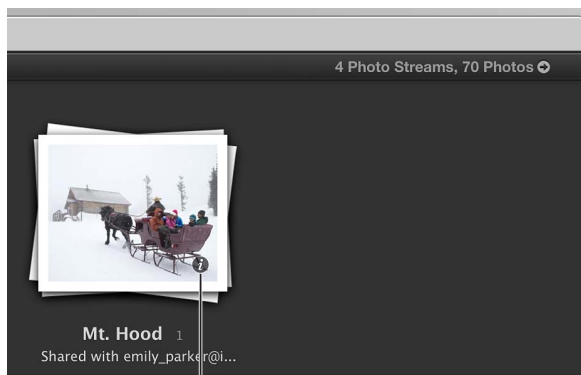
Managing Subscribers to Your Shared Photo Streams

You can add and remove subscribers to your shared photo streams at any time.

WARNING: If you plan to remove a subscriber from a shared photo stream and you think that person might like to keep some photos in the shared stream, you need to alert the person to save the photos before you remove him or her from the subscription list. When you remove the subscriber, your shared stream along with all of its photos is immediately removed from the subscriber's Apple devices.

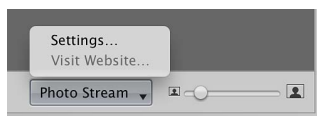
To add and remove subscribers to a shared photo stream

- 1 In the Web section of the Library inspector, select Photo Stream.
- 2 Do one of the following:
 - Move the pointer over the shared photo stream's thumbnail, then click the Info button (with an "i").



Click the Info button to open the Photo Stream dialog.

- Double-click the shared photo stream's thumbnail, then choose Settings from the Photo Stream pop-up menu in the tool strip.



- 3 In the Photo Stream dialog, do one of the following:
 - *To invite a new subscriber:* Type the invitee's email address in the "Shared with" field. If the person you're inviting doesn't have an iCloud account, select the Public Website checkbox.
 - *To remove a subscriber:* Select the subscriber's email address, then press Delete. If the subscriber doesn't have an iCloud account and you invited him or her to view a public website, deselect the Public Website checkbox.
- 4 Click OK.

If you invited a new person to view your shared photo stream, an email and a notification are sent, asking that person to subscribe to your shared photo stream. If you removed an existing subscriber from your shared photo stream, the shared stream is immediately removed from the subscriber's Apple devices. If you want to reinvite a subscriber to view your shared photo stream, delete the person's email address from the "Shared with" field, then add the email address again.

Subscribing to Shared Photo Streams

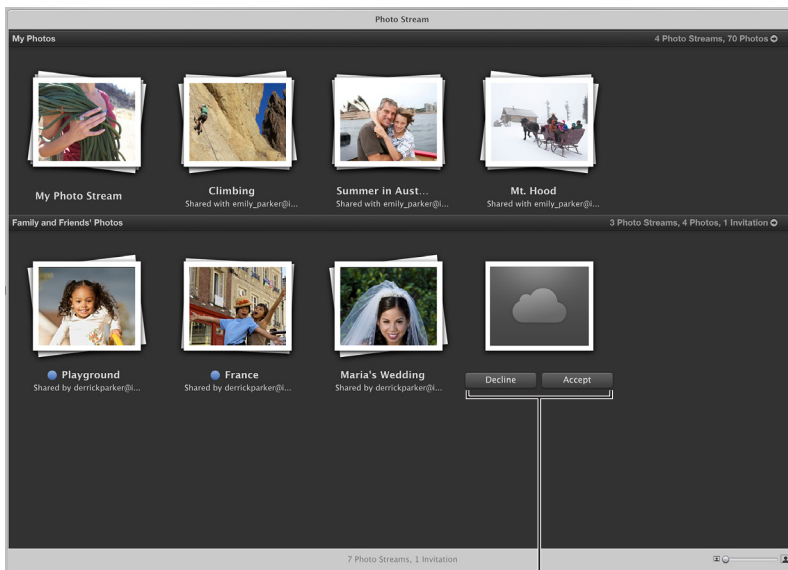
If you have an iCloud account, you can subscribe to shared photo streams that your family and friends invite you to. After you accept, you can view the photos on all your Apple devices, including your Mac. You can also mark the photos you like and comment on photos. You can unsubscribe from a shared photo stream at any time. If you want to use a photo in a shared photo stream that you subscribe to, you can import the photo into your Aperture library and then make adjustments to the photo as needed.

To subscribe to a shared photo stream

To subscribe to a shared photo stream, all you have to do is accept the invitation. Invitations to a shared photo stream are sent by email and notifications.

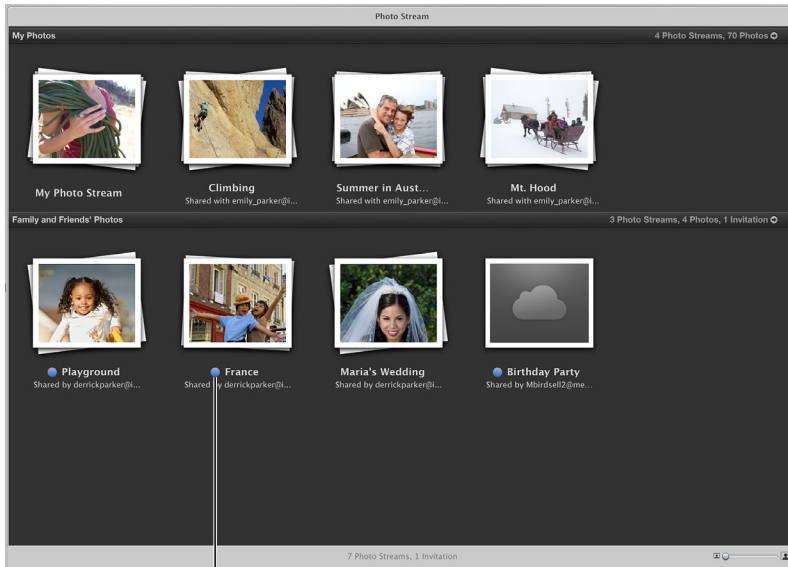
- 1 In the Web section of the Library inspector, select Photo Stream.
- 2 In the lower portion of Photo Stream view, move the pointer over the shared photo stream's thumbnail, then click the Accept button.

If you don't want to subscribe to the shared photo stream, click the Decline button.



Click to accept or decline an invitation to a shared photo stream.

Shared photo streams that you subscribe to appear in the lower portion of Photo Stream view. A blue dot next to the shared photo stream's name indicates that new photos have been added to the photo stream or new comments have been added to one of its photos. In addition, a number appears above the Aperture icon in the Dock to indicate that new photos and comments have been shared with you.



A blue dot indicates that new photos or comments have been added.

To unsubscribe from a shared photo stream

If you want to unsubscribe from a photo stream, all you have to do is delete it.

WARNING: When you unsubscribe from a shared photo stream, the photos contained in the shared stream are immediately deleted from all your devices. If you want to keep some of the photos, you should import them into your Aperture library first.

- 1 In the Web section of the Library inspector, select Photo Stream.
- 2 Select the photo stream you want to unsubscribe from, then press Command-Delete.

To comment on or “like” a photo in a shared photo stream

When someone shares a photo with you in a shared photo stream, you can like the photo or add comments to it.

- 1 In the Web section of the Library inspector, select Photo Stream.
- 2 Double-click the shared photo stream containing the photo you want to like or comment on.
- 3 Select the photo.
- 4 In the Info inspector, choose Comments from the Metadata View pop-up menu, then do either of the following:

- *To like the photo:* Click the Like button (with a smiley face).



Click the Like button to "like" a photo.

- *To add a comment to the photo:* Type the comment in the text field, then click Post.



When you like or comment on a photo in a shared stream, a notification is sent to all the Apple devices of the photo stream's creator and subscribers. You can delete comments you added to a photo by placing the pointer over the comment and clicking the Delete button that appears.

To save photos from shared photo streams you subscribe to

Photos in shared photo streams are view-only. However, you can import the photos into your Aperture library, apply image adjustments, share the updated photos, and add them to your slideshows and books.

- 1 In the Web section of the Library inspector, select Photo Stream.
- 2 Double-click the shared stream containing the photos you want to save.
- 3 Select the photos.
- 4 Import the photos by doing one of the following:
 - Drag the photos into a project in the Library inspector.
 - In the histogram area of the Adjustments inspector, click the Import Photo button.

Emailing Photos

While it's not the best method for delivering uncompressed or large image files, email provides a quick and easy way to deliver photos. Aperture contains three export presets (Email Small, Email Medium, and Email Original Size) that create compressed JPEG files that are easy to send via email. If these export presets don't meet your needs, you can create your own custom email export preset.

You can also have Aperture transfer a photo directly to your email application. To specify that Aperture use a specific email application to send your photos, choose the email application you want to use in the Export pane of the Preferences window. You can also specify the email export preset used to prepare the photos.

To specify an email application and email export preset for Aperture to use

- 1 Choose Aperture > Preferences, or press Command-Comma (,), then click Export.
- 2 In the Export pane of the Preferences window, choose the email application you want to use from the "Email using" pop-up menu.
- 3 To specify an export preset for Aperture to use when preparing photos for email transfer, choose a preset from the "Email Photo Export preset" pop-up menu.

If none of the presets meets your needs, choose Edit from the "Email Photo Export preset" pop-up menu and create a new export preset.

For more information about creating export presets, see [Creating an Export Preset](#) on page 442.

To send a photo directly to your email application

- 1 Select the photo you want to send.
- 2 Do one of the following:
 - Choose File > Share > Email (or press Option-E).
 - Choose Email from the Share pop-up menu in the toolbar.

The photo is exported directly to your email application.

Note: Before you attempt to email a photos, find out the maximum file size your email client supports. If your exported photos exceed this maximum file size, consider using FTP software or another file-sharing technique to deliver your photos.

To export a photo or photos to attach to an email message later

- 1 Select the photo or photos you want to export.
- 2 Choose File > Export > Versions (or press Command-Shift-E).
- 3 Navigate to the location where you want the exported photos placed.
- 4 Choose an image file format from the Export Preset pop-up menu.
- 5 Choose a name format for your files from the Name Format pop-up menu.
- 6 When you're ready to export files, click Export Versions.

You can now open your email application and attach the exported files.

Publishing Photos to Flickr and Facebook

An Overview of Sharing Photos with Flickr and Facebook

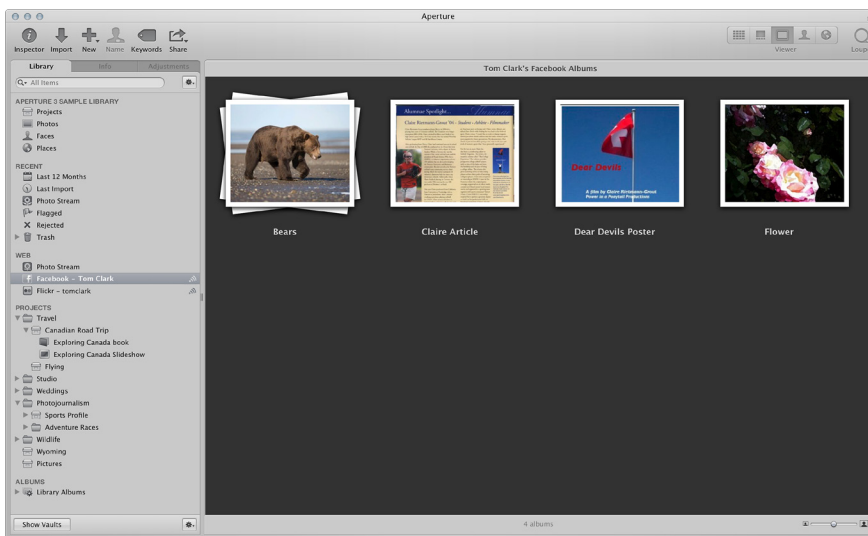
Aperture lets you create Flickr and Facebook albums to collect photos for publication on <http://www.flickr.com> and <http://www.facebook.com>. Photos placed in Flickr and Facebook albums in Aperture are automatically exported to and published in your Flickr and Facebook accounts.

Any comments your friends post about a photo in one of your Facebook accounts appear in the Info inspector in Aperture. For more information about reviewing comments your friends post about your photos, see [Viewing and Changing Metadata in the Info Inspector and Inspector HUD](#) on page 183.

The first time you create a Flickr or Facebook album, Aperture prompts you to enter your account information. If you don't have an account with Flickr or Facebook, you can create one. Aperture stores your account information for each website in the OS X secure keychain.



You can also post photos to multiple Flickr and Facebook accounts from within Aperture. With your account settings in place, Aperture immediately creates a Flickr or Facebook album and then publishes the album to the corresponding account's website. Your Flickr and Facebook accounts appear in the Web section of the Library inspector. Select an account to view its albums in Web Albums view.



Once you have an existing Flickr or Facebook album in place, you can continue to publish photos to the web album. Any photos posted to your Flickr and Facebook accounts from other software applications, your web browser, or a mobile device automatically appear in their respective albums in Web Albums view.

You can have Aperture check to see if any new albums appear in your Facebook accounts or if any new sets appear in your Flickr accounts. If Aperture detects the presence of a new album in your Facebook account, it downloads the album's configuration. The new Facebook album appears in the Web Albums view for the account. If Aperture detects a new set in your Flickr account, the new set appears as a Flickr album in the Web Albums view for the account. To view the contents of a new album, double-click the new album in the account's Web Albums view.

Note: A Flickr album is not created for photos and video clips published to your Flickr photostream. For more information about publishing Flickr sets and uploading photos and video clips to your Flickr photostream, see [Signing In to Flickr and Facebook](#) on page 569.

Signing In to Flickr and Facebook

In order to share photos from your Aperture library with Flickr and Facebook, you create Flickr and Facebook albums. The first step in creating Flickr and Facebook albums is entering your Flickr and Facebook account details. You only have to do this once. After you enter your account details, Aperture securely stores the information in the OS X user account's secure keychain. Then you can create as many Flickr and Facebook albums as you wish and publish the photos in the albums whenever you have an Internet connection. You can also publish to multiple Flickr and Facebook accounts.

Important: You must have an Internet connection to share photos from your Aperture library with Flickr and Facebook.

The first time you create a Flickr or Facebook album, Aperture asks you to sign in to your Flickr or Facebook account.

To sign in to Flickr and create a new Flickr album

- 1 In Aperture, select a group of photos or a video.

Note: If you have a basic Flickr account, you can upload only one video file at a time to your Flickr set.

- 2 Do one of the following:
 - Choose File > Share > Flickr.
 - Choose Flickr from the Share pop-up menu in the toolbar.
- 3 In the dialog that appears, click Set Up.

The Flickr account sign-in page opens in your web browser.

- 4 In the Flickr account sign-in page, do the following:
 - Enter your Yahoo! ID.
 - Enter your password.
 - Select the "Keep me signed in" checkbox.

Selecting this checkbox keeps you signed in for two weeks and prevents you from having to sign in to Flickr every time you want to publish photos to your Flickr account within a two-week period.

- 5 Click Sign In.

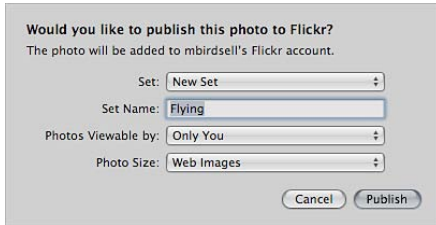
A new page opens in Flickr asking if you arrived at this page via Aperture Uploader.

- 6 Click Next.

A new page opens in Flickr asking if you want Aperture Uploader to link to your Flickr account.

- 7 Click the “OK, I’ll Authorize It” button, then switch back to Aperture.

A new dialog appears in Aperture with controls for creating a new Flickr set as well as setting access restrictions for your Flickr page.



- 8 Do the following:
 - If necessary, choose the Flickr account you want to publish to from the Flickr Account pop-up menu.
 - Choose New Set from the Set pop-up menu.
 - Give your Flickr set a name in the Set Name field.
 - In the “Photos Viewable by” pop-up menu, choose an access level to set who can view your Flickr set.
 - In the Photo Size pop-up menu, choose whether or not you want the photos resized and optimized for publication.
- 9 Click Publish.

Aperture securely saves your Flickr account information to your OS X user account’s keychain and then publishes your album to Flickr. The new Flickr album representing the online Flickr set appears in Web Albums view, which is accessed by selecting the Flickr account in the Web section of the Library inspector. For more information about publishing additional photos to your Flickr set, see [Updating Your Flickr and Facebook Albums](#) on page 576.

You can also use the Info inspector to view the specific Flickr account and the set the photos were published to, along with when the photos were published. For more information, see [Viewing and Changing Metadata in the Info Inspector and Inspector HUD](#) on page 183.

To sign in to Flickr and upload a photo or video to your photostream

- 1 In Aperture, select a photo or a video.

Note: If you have a basic Flickr account, you can upload only one video file at a time to your Flickr photostream.
- 2 Do one of the following:
 - Choose File > Share > Flickr.
 - Choose Flickr from the Share pop-up menu in the toolbar.
- 3 In the dialog that appears, click Set Up.

The Flickr account sign-in page opens in your web browser.

4 In the Flickr account sign-in page, do the following:

- Enter your Yahoo! ID.
- Enter your password.
- Select the “Keep me signed in” checkbox.

Selecting this checkbox keeps you signed in for two weeks and prevents you from having to sign in to Flickr every time you want to publish photos to your Flickr account within a two-week period.

5 Click Sign In.

A new page opens in Flickr asking if you arrived at this page via Aperture Uploader.

6 Click Next.

A new page opens in Flickr asking if you want Aperture Uploader to link to your Flickr account.

7 Click the “OK, I’ll Authorize It” button, then switch back to Aperture.

A new dialog appears in Aperture with controls for creating a new Flickr set as well as setting access restrictions for your Flickr page.

8 Do the following:

- If necessary, choose the Flickr account you want to publish to from the Flickr Account pop-up menu.
- Choose Photostream from the Set pop-up menu.
- In the “Photos Viewable by” pop-up menu, choose an access level to set who can view your Flickr set.
- In the Photo Size pop-up menu, choose whether or not you want the photos resized and optimized for publication.

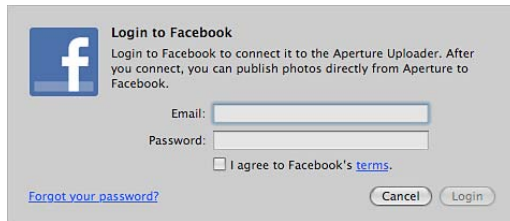
9 Click Publish.

Aperture securely saves your Flickr account information to your OS X user account’s keychain and then publishes your photo or video to your Flickr photostream.

You can also use the Info inspector to view the specific Flickr account, along with when the photo or video was published. For more information, see [Viewing and Changing Metadata in the Info Inspector and Inspector HUD](#) on page 183.

To sign in to Facebook and create a new Facebook album

- 1 In Aperture, select a photo or a group of photos.
- 2 Do one of the following:
 - Choose File > Share > Facebook.
 - Choose Facebook from the Share pop-up menu in the toolbar.
- 3 In the dialog that appears, do the following:
 - Enter your email address.
 - Enter your password.
 - Select the “I agree to Facebook’s terms” checkbox.
 - Click Login.



- 4 In the dialog that appears, do the following:
 - If you have multiple Facebook accounts, choose the Facebook account you want to publish to from the Facebook Account pop-up menu.
 - Choose New Album from the Albums pop-up menu.
 - Give your Facebook album a name in the Album Name field.
 - In the Photos Viewable By pop-up menu, choose an access level to set who can view your Facebook album.
 - Click Publish.



Aperture securely saves your Facebook account information to your OS X user account’s keychain and then publishes your album to Facebook. The new Facebook album appears in Web Albums view, which is accessed by selecting the Facebook account in the Web section of the Library inspector.

Note: You will no longer have to log in to your Facebook account if there is a change to this Facebook album or when you create new Facebook albums. For more information about publishing your Facebook album, see [Updating Your Flickr and Facebook Albums](#) on page 576.

To sign in to Facebook and upload a photo or video to your Facebook Wall

1 In Aperture, select a photo or a video.

Note: You can upload only one photo or video file at a time to your Facebook Wall.

2 Do one of the following:

- Choose File > Share > Facebook.
- Choose Facebook from the Share pop-up menu in the toolbar.

3 In the dialog that appears, do the following:

- Enter your email address.
- Enter your password.
- Select the “I agree to Facebook’s terms” checkbox.
- Click Login.



4 In the dialog that appears, do the following:

- If you have multiple Facebook accounts, choose the Facebook account you want to publish to from the Facebook Account pop-up menu.
- Choose Wall from the Album pop-up menu.
- In the Comment field, enter a comment to appear with your photo or video in Facebook.
- Click Publish.



Aperture securely saves your Facebook account information to your OS X user account’s keychain and then publishes your photo or video, along with your comment, to your Facebook account’s Wall. Any comments your friends post to your photo on Facebook appear in the Metadata inspector when the photo is selected in Aperture. For more information, see [Viewing and Changing Metadata in the Info Inspector and Inspector HUD](#) on page 183.

Creating Flickr and Facebook Albums

Once you set up your account information and create your first Flickr or Facebook album, creating new Flickr and Facebook albums is a simple process.

To create a new Flickr album to publish as a Flickr set

- 1 Do one of the following:
 - In the Library inspector, select an item.
 - In the Browser, select a group of photos.
- 2 Do one of the following:
 - Choose File > Share > Flickr.
 - Choose Flickr from the Share pop-up menu in the toolbar.
- 3 In the dialog that appears, do the following:
 - If you have multiple Flickr accounts, choose the Flickr account you want to publish to from the Flickr Account pop-up menu.
 - Choose New Set from the Set pop-up menu.
 - In the Set Name field, give your Flickr set a name.
 - In the “Photos Viewable by” pop-up menu, choose an access level to set who can view your Flickr set.
 - In the Photo Size pop-up menu, choose an image size option.
- 4 Click Publish.

Aperture publishes your album to Flickr as a Flickr set, and the new Flickr album appears in Web Albums view, which is accessed by selecting the Flickr account in the Web section of the Library inspector. For more information about viewing Flickr albums, see [Viewing Flickr and Facebook Albums](#) on page 575.

To create a new Facebook album

- 1 Do one of the following:
 - In the Library inspector, select an item.
 - In the Browser, select a group of photos.
- 2 Do one of the following:
 - Choose File > Share > Facebook.
 - Click the Facebook button in the toolbar.
- 3 In the dialog that appears, do the following:
 - If you have multiple Facebook accounts, choose the Facebook account you want to publish to from the Facebook Account pop-up menu.
 - Choose New Album from the Albums pop-up menu.
 - In the Album Name field, give your Facebook album a name.
 - In the Photos Viewable By pop-up menu, choose an access level to set who can view your Facebook album.
- 4 Click Publish.

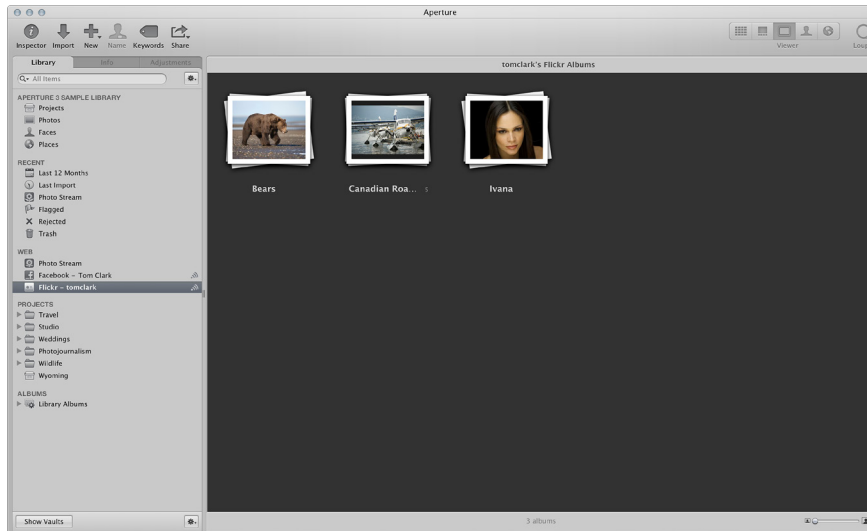
Aperture publishes your album to Facebook, and the new Facebook album appears in Web Albums view, which is accessed by selecting the Facebook account in the Web section of the Library inspector. For more information about viewing Facebook albums, see [Viewing Flickr and Facebook Albums](#) on page 575.

Viewing Flickr and Facebook Albums

You can view the contents of your Flickr and Facebook albums in Aperture at any time.

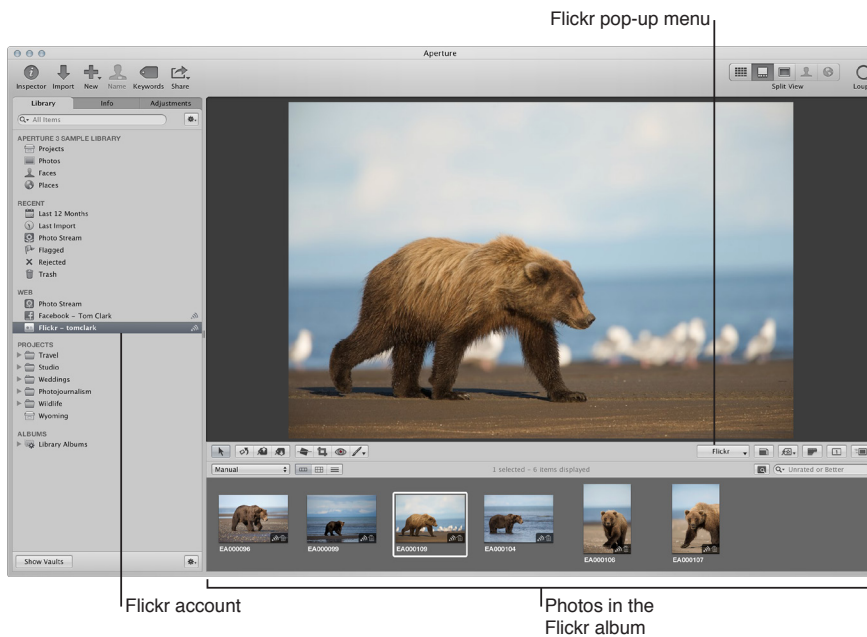
To view a Flickr or Facebook album in Aperture

- 1 In the Web section of the Library inspector, select the Flickr or Facebook account containing the albums you want to view.



The albums for the selected Flickr or Facebook account appear in Web Albums view to the right of the Library inspector.

- 2 In Web Albums view, double-click an album's thumbnail to view its contents.



Updating Your Flickr and Facebook Albums

As your Flickr and Facebook albums grow, you can publish them at any time. Aperture checks to see which photo versions have already been published in the album and then uploads any version that has changed and any new versions. If you're not sure if a Flickr or Facebook album is up to date or you just want to check your Flickr or Facebook page, you can visit your published Facebook album or Flickr set from within Aperture.

To publish new photos to an existing Flickr set

- 1 Select the photos you want to publish to your Flickr album.
- 2 Do one of the following:
 - Choose File > Share > Flickr.
 - Choose Flickr from the Share pop-up menu in the toolbar.
 - Drag the photos to the Flickr account in the Web section of the Library inspector.The Flickr publication dialog appears.
- 3 Do the following:
 - a If necessary, choose the Flickr account you want to publish to from the Flickr Account pop-up menu.
 - b Choose the album's name from the Set pop-up menu.
 - c In the "Photos Viewable by" pop-up menu, choose an access level to set who can view your Flickr set.
 - d In the Photo Size pop-up menu, choose whether or not you want the photos resized and optimized for publication.
- 4 Click Publish.

Any changed or new versions in the selected Flickr album are uploaded to the Flickr set.

To publish new photos to an existing Facebook album

- 1 Select the photos you want to publish to your Facebook album.
- 2 Do one of the following:
 - Choose File > Share > Facebook.
 - Choose Facebook from the Share pop-up menu in the toolbar.
 - Drag the photos to the Facebook account in the Web section of the Library inspector.The Facebook publication dialog appears.
- 3 Do the following:
 - a If you have multiple Facebook accounts, choose the Facebook account you want to publish to from the Facebook Account pop-up menu.
 - b Choose the album's name from the Albums pop-up menu.
- 4 Click Publish.

Any changed or new versions are uploaded to the selected Facebook album.

To have Aperture immediately check for new Flickr sets or Facebook albums online

You can have Aperture immediately check to see if any of your friends have published new Flickr sets or Facebook albums to your accounts online.

- In the Library inspector, click the Sync button (with a broadcast icon) to the right of the Flickr or Facebook account's name.

Any new Flickr sets or Facebook albums created outside of Aperture are downloaded to the Web Albums view for the account selected in the Library inspector.

To have Aperture check an individual Flickr or Facebook album for new content online

- In Web Albums view, Control-click the Flickr or Facebook album you want to update, then choose Synchronize Album from the shortcut menu.

Any new photos or videos posted to your Flickr set or Facebook album online appear in the selected album in Web Albums view. Double-click the album to view its contents.

To visit your published Flickr set

- 1 In the Library inspector, select the Flickr account containing the album you want to visit.

The Web Albums view for the selected Flickr account appears.

- 2 In Web Albums view, do one of the following:

- Double-click the Flickr album you want to visit, then choose Visit Set from the Flickr pop-up menu in the tool strip.



- Control-click the Flickr album you want to visit, then choose Visit Set from the shortcut menu.

Your web browser opens your Flickr page and displays your published Flickr set.

To visit your published Facebook album

- 1 In the Library inspector, select the Facebook account containing the album you want to visit.

The Web Albums view for the selected Facebook account appears.

- 2 In Web Albums view, do one of the following:

- Double-click the Facebook album you want to visit, then choose Visit Album from the Facebook pop-up menu in the tool strip.



- Control-click the Facebook album you want to visit, then choose Visit Album from the shortcut menu.

Your web browser opens your Facebook page and displays your published album.

Deleting Flickr and Facebook Albums

You can delete Flickr and Facebook albums in Aperture at any time.

WARNING: Deleting Flickr and Facebook albums in Aperture permanently deletes the corresponding Flickr sets and Facebook albums online, along with their contents. If you want to temporarily remove a Flickr or Facebook account in Aperture, but keep the albums and photos as they are in your Flickr or Facebook account online, you can always disable your Flickr or Facebook account in Aperture. For more information about disabling and enabling accounts in Aperture, see [Disabling and Enabling Flickr and Facebook Accounts](#) on page 579.

To delete a Flickr or Facebook album

- 1 In the Library inspector, select the Flickr or Facebook account containing the album you want to delete.
- 2 In Web Albums view, select the Flickr or Facebook album you want to delete.
- 3 Choose File > Delete Album (or press Command-Delete).
- 4 In the dialog that appears, select the “Import photos to your library before deleting” checkbox if you want to save the photos before deleting the album in your library and online.
- 5 Click Delete.

The Flickr or Facebook album you selected in the Library inspector is deleted from the Aperture library, as well as from your Flickr or Facebook account online.

Changing Your Facebook Settings

After publishing an album to Facebook, you can change its name as well as the restrictions for who can view it. For example, if you recently published photos of your latest family vacation on Facebook and made the album viewable by everyone, you can use the Facebook pop-up menu in the tool strip to make the album viewable only by friends.

To change the settings for a published Facebook album

- 1 In the Library inspector, select the Facebook account containing the album whose settings you want to change.
- 2 In Web Albums view, select the album whose settings you want to change.
- 3 In the tool strip, choose Settings from the Facebook pop-up menu, then specify new settings in the dialog that appears.
- 4 Click Change Settings.

Working with Multiple Flickr and Facebook Accounts

In Aperture, you can share photos with multiple Flickr and Facebook accounts.

To add multiple Flickr and Facebook accounts to Aperture

- 1 Choose Aperture > Preferences, or press Command-Comma (,).

The Preferences window appears.

- 2 In the Preferences window, click Web, then click the Add (+) button to add an account.

- 3 In the dialog that appears, choose a type of account, then click Add.

- 4 Do one of the following:

- *To log in to a Flickr account:* Click Set Up.

Your browser opens. Follow the onscreen instructions to sign in to Flickr using your Yahoo! ID and password, then authorize the Aperture Uploader to post photos to your Flickr account on the following page.

- *To log in to a Facebook account:* Enter your email address and password, select the “I agree to Facebook’s terms” checkbox, then click Login.

You can now share photos with the new Flickr or Facebook account. Flickr sets and Facebook albums created outside of Aperture can be downloaded to the Library inspector. For more information, see [Updating Your Flickr and Facebook Albums](#) on page 576.

Disabling and Enabling Flickr and Facebook Accounts

You can disable access to your Flickr or Facebook accounts and then enable access to them again from within Aperture at any time. When a Flickr or Facebook account is disabled in Aperture, all of the disabled account’s albums are removed from Aperture. However, the albums and their photos are retained and still appear in the Flickr or Facebook account.

When you choose to disable an account in Aperture, a dialog appears asking if you want to import the photos in the account’s albums into your Aperture library. If you choose to import the photos, Aperture places the photos in a new project in the Library inspector. If you choose not to import the photos, Aperture places the contents of the albums in the Aperture Trash. Any sharing history that appears in the Info inspector for the disabled account is deleted.

If you regularly enable and disable your Flickr and Facebook accounts in Aperture, and you want to permanently import content posted to these accounts outside of Aperture, drag the content you want to import from the Flickr or Facebook album to a new or existing project in the Library inspector. Aperture generates new copies of the media and places them in the selected project.

To disable all of your online accounts in Aperture

- Choose File > Web Accounts > Disable All Accounts.

All of your online Flickr and Facebook accounts and their associated albums are disabled and removed from Aperture. However, the album configurations are saved in case you want to reenable the accounts later. The albums, sets, and their contents still appear in the Flickr or Facebook accounts online.

To disable a single Flickr or Facebook account in Aperture

- Choose File > Web Accounts > Disable [account].

The selected Flickr or Facebook account and all its albums are disabled and removed from Aperture. However, the album configurations are saved in case you want to reenable the account later. The albums, sets, and their contents still appear in the disabled Flickr or Facebook account online.

To enable all of your Flickr and Facebook accounts in Aperture

After disabling your Flickr or Facebook accounts in Aperture, you can always reenable them.

- Choose File > Web Accounts > Enable All Accounts.

The published albums for the web accounts appear in the Library inspector.

To enable a single Flickr or Facebook account in Aperture

- Choose File > Web Accounts > Enable [account].

The published albums for the selected web account appear in the Library inspector.

An Overview of the Backup Workflow

To safeguard your photography portfolio, it's important to establish a reliable backup system and back up regularly. You can use the Aperture backup system to back up the entire Aperture library on a regular basis. Aperture clearly indicates how up to date your most recent backup is, and you can update your backups immediately whenever you wish. In the event of a rare equipment failure or unforeseen catastrophe such as a fire or weather-related damage, you can easily restore the entire Aperture library onto your computer or a new computer.

Making backup copies of the library affords you the reassurance that should an unforeseen incident cause the loss of your files, you can easily restore them from your backup vaults later. If you back up the library regularly and store backups offsite, you run little risk of losing your work.

When you back up your photos, Aperture makes a complete copy of the library in its current state. If you remove items from the library, those items are removed from the backup when it is next updated.

You can make and store as many complete backups of the library as you wish. If you want to keep a historical archive of the library, you'll need to devise a system of storing separate backups in some regular chronological order.

You set Aperture to back up a copy of the library to a designated storage area called a *vault*. For safety and redundancy, use external hard disks to hold your vaults. Aperture lets you create as many vaults as you deem necessary. For example, you may want to create one vault on an external hard disk for daily backups and a second vault on another external hard disk that you keep offsite.

All originals for managed images, all versions, and all metadata, previews, and adjustment information associated with your photos are backed up. The versions, previews, and metadata associated with referenced images are also backed up in the vault.

Important: Referenced images' originals are not backed up in the vault with the library. Because the originals for referenced images are stored outside of the library, you must manage the backup and archiving of them yourself.

Although rare, mechanical failures and unexpected damage to your computer system can occur. And from time to time you may upgrade your equipment and need to move your portfolio to a new system. Aperture allows you to easily restore the entire Aperture library from your backup disks onto your computer or a new system. For more information about restoring images and projects, see [Restoring Your Aperture System](#) on page 586.

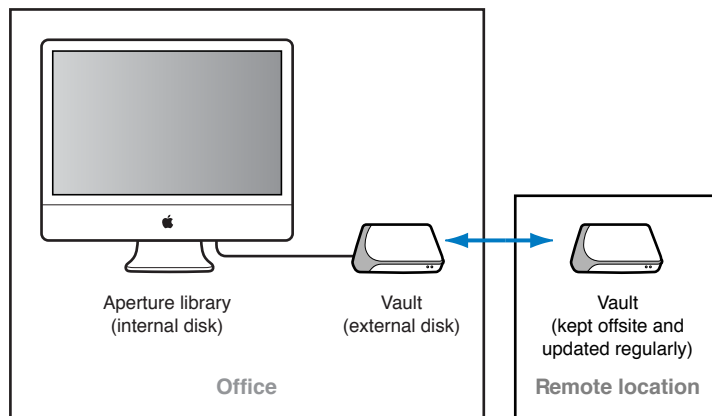
As you add to your photo library, Aperture automatically tracks which files have been backed up to each vault. When there are image files in the library that are not backed up in a vault, the Vault Status button appears red. When your vault is up to date, the Vault Status button for the vault appears black. When you have made image modifications (such as image adjustments or metadata or keyword changes) that have not yet been backed up in a vault, the button appears yellow. Aperture does not automatically update your vaults, but you can update your vaults at any time.

Important: Aperture does not back up your library automatically. You must tell Aperture to back up your library by either clicking the Update All Vaults button, which creates a mirror copy of your library on all connected vaults, or clicking the Vault status button for a vault, which creates a mirror copy of your library on that vault.

Planning Your Backup System

As you begin working with Aperture, it's important to perform regular backups of your photos. When you import new photos from your camera, you should immediately create a backup so that you have copies safely stored. As you routinely work with Aperture, creating new photo versions and making adjustments, you'll want to make sure your work is copied to disk and your backup vaults are up to date.

A typical backup system used with Aperture might look like the following:



This system backs up the Aperture library to two vaults stored on external hard disks. You routinely back up the library on one external hard disk. You use the second hard disk as a backup that you keep offsite. You can then alternately back up the library on your onsite external hard disk and rotate it with the offsite hard disk to keep all your vaults updated.

To set up your Aperture backup system, you need to do the following:

- Determine the number of vaults you need. For example, do you need one for routine backups, one for weekly backups, and one for offsite storage?
- Determine the number of hard disks you need for routine backups.
- Determine the number of hard disks you'll use for storing backups offsite.
- Connect your hard disk drives to your computer.
- Open Aperture and create the vaults you need, assigning a hard disk to each vault.
- Update the new empty vaults with copies of the Aperture library.
- Disconnect one of the vault hard disks and take it to an offsite location for safekeeping.

When planning the amount of storage space you'll need, estimate the amount of disk space needed to hold your existing digital images (photos you plan to import into Aperture) and the amount of space you might need for new projects. For example, RAW images typically require 8 to 25 or more megabytes (MB) of disk space per file. Estimating the number of photos in a typical project and the number of projects you usually create in a year, you can make a rough estimate of what might represent a year's storage space.

Showing the Vault Pane

You use the Vault pane below the Library inspector to set the location of your vaults and check their status.

To show the Vault pane

Do one of the following:

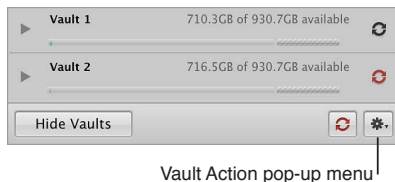
- Choose Window > Show Vaults (or press Shift-R).
- Click the Show Vaults button.

Creating Vaults

Before you can back up your files, you must create a vault and assign a hard disk to it. After you assign a disk to the vault, Aperture uses the vault to back up the entire library. You can create additional vaults and assign hard disks to them, and each additional vault also records a complete backup of the library.

To create a new vault

- 1 Do one of the following:
 - Choose File > Vault > Add Vault.
 - Choose Add Vault from the Vault Action pop-up menu.



- 2 A dialog appears, listing the number of managed files that will be backed up to the vault and the number of referenced files that will not be included. Click Continue to proceed.
- 3 In the Add Vault dialog, specify the following options:
 - Type a vault name in the Save As field.
 - Choose where you want the vault stored from the Where pop-up menu.
- 4 Click Add.

The new empty vault appears in the Vault pane.

Important: To ensure preservation of your image assets, make sure to assign a separate external hard disk drive to each vault.

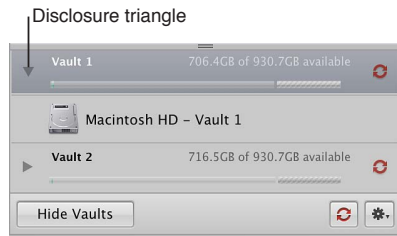
To update a vault

When you create a new vault, it is empty. Therefore, as soon as you create a new vault, you should update it.

- In the Vault pane, click the Vault Status button to the right of the vault's name.
For more information about updating vaults, see [Updating Vaults](#) on page 584.

To see the hard disk assigned to a vault

- In the Vault pane, click the disclosure triangle beside the vault name.



You can easily see the amount of free space your vault has available next to the vault name. Make sure to assign enough disk space to the vault to ensure a complete backup of the library and to allow the library to grow as you import new photos over time.

Updating Vaults

You can have Aperture update your vaults at any time. You can determine which vaults need to be updated by the color of the Vault Status button next to each vault. You can have Aperture update a particular vault or all of your vaults at once.

After you import new photos into Aperture, you should make an immediate backup to ensure that the digital files exist in more than one place. You can make an immediate backup of your imported photos by updating an existing vault.

To update all connected vaults

- 1 Do one of the following:
 - Choose File > Vault > Update All Vaults.
 - In the Vault pane, click the Update All Vaults button.
- 2 In the dialog that appears, click Update.

To update an existing vault

- 1 Do one of the following:
 - Choose Window > Show Vaults (or press Shift-R).
 - Click the Show Vaults button.
- 2 Select the vault you want to update.
- 3 Do one of the following:
 - In the Vault pane, choose Update Vault from the Vault Action pop-up menu (with a gear icon).
 - Click the Vault Status button beside the vault name.
- 4 In the dialog that appears, click the Update button.

Disconnecting a Vault's Hard Disk Drive from Your System Temporarily

You may routinely disconnect a backup hard disk drive from your Aperture system and take it to a safe offsite location. When you disconnect a backup hard disk from your computer, Aperture takes the associated vault offline. When you reconnect the hard disk, Aperture automatically detects the hard disk and connects it to the corresponding vault.

To disconnect a vault's hard disk drive from your Aperture system

- 1 In the Finder, drag the icon for the hard disk drive to the Trash, or select the disk in the sidebar of a Finder window and click the Eject button.
- 2 Disconnect the hard disk drive from your computer.

Reconnecting a Vault's Hard Disk Drive to Your System

If you keep a backup of the Aperture library on an offsite hard disk drive, you'll occasionally need to bring it in for updating. Aperture keeps track of the hard disks that have been disconnected from their vaults. When you reconnect a hard disk drive, Aperture automatically detects the hard disk, determines which vault it's assigned to, and reconnects the vault.

At times, you may rename a backup hard disk drive or add a new one and copy a vault to the new disk. In this case, you need to specify the location, or path, of the new or changed backup hard disk drive.

To specify a vault's new location or path

- 1 Connect the hard disk drive to your computer.
- 2 To show the Vault pane, do one of the following:
 - Choose Window > Show Vaults (or press Shift-R).
 - Click the Show Vaults button.
- 3 Select the vault to be updated to a new path.
- 4 Choose Update Vault Path from the Vault Action pop-up menu (with a gear icon).
- 5 Navigate to the location of the vault on the hard disk drive, select it, then click Update Path.

Deleting a Vault Permanently

You can delete an entire vault and all the photos on it when you need to reconfigure your backup system. This is useful when you have moved your backup vault to a larger-capacity hard disk and you want to delete the vault information from the current hard disk drive to use it for other purposes.

To permanently remove a vault and delete its information

- 1 Do one of the following:
 - Choose Window > Show Vaults (or press Shift-R).
 - Click the Show Vaults button.
- 2 In the Vault pane, select the vault you want to remove.
- 3 Do one of the following:
 - Choose File > Vault > Remove Vault.
 - Choose Remove Vault from the Vault Action pop-up menu (with a gear icon).

A dialog appears, asking if you want to remove the vault.

- 4 Click one of the following buttons:
 - *Remove and Delete*: When you click this button, Aperture no longer tracks the vault, and the vault's files are deleted from your hard disk.
 - *Remove*: When you click this button, Aperture no longer tracks the vault, but the vault's files remain on the hard disk.

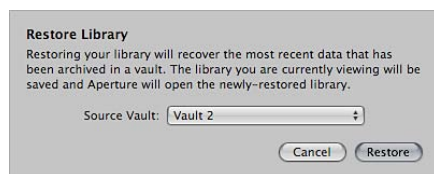
Restoring Your Aperture System

If you buy a new computer or use another system at a different location and want access to the Aperture library, you can install Aperture and then transfer the library from your vault (on your backup disk) to the other computer. If you experience equipment failure or other unexpected events, such as fire or weather-related damage to your equipment, you can easily restore the entire library to your new computer from a backup disk.

To restore the entire library from an external backup disk

- 1 Connect the hard disk drive that contains the most up-to-date vault to your computer and open Aperture.
- 2 Choose File > Vault > Restore Library.

The Restore Library dialog appears.



- 3 Choose the vault you want to use to restore your library from the Source Vault pop-up menu.
If the vault doesn't appear in the Source Vault pop-up menu, choose Select Source Vault from the Source Vault pop-up menu, navigate to the vaults location in the Select Source Vault dialog, then click Select.
- 4 Click Restore, then click Restore again.

Repairing and Rebuilding Your Aperture Library

In the rare event that your Aperture database becomes corrupted or the files within it have permissions issues, Aperture provides a few methods for reconstituting your Aperture library and the file relationships within it.

To repair or rebuild your Aperture library

- 1 Close Aperture, if it's open.
- 2 Locate the Aperture library you want to fix, then hold down the Command and Option keys while double-clicking the Aperture library.

The Photo Library First Aid dialog appears.



- 3 Do one of the following:
 - *To repair the permissions of the files within your Aperture library:* Select Repair Permissions.
This option should be used when Aperture can't access some of the image files within the database or Aperture is unable to open the library itself. The Repair Permissions option reviews each file in your Aperture library and sets the read and write access of each file where appropriate, allowing Aperture to access the files again.
Note: This option does not relocate referenced images whose original image files are offline. For more information about reconnecting offline images, see [Reconnecting Missing or Offline Referenced Images](#) on page 102.
 - *To repair your Aperture library file:* Select Repair Database.
This is the first option you should use if you believe there is something wrong with the Aperture library other than image file access issues.
 - *To rebuild your database from scratch:* Select Rebuild Database.
This option should be used as your last measure as it can be time-consuming for large photo libraries. If you have tried repairing your database, and the issues you are encountering with your Aperture library still persist, you should use the Rebuild Database option. Aperture examines the library's entire database and rebuilds each component until it reconstitutes your original Aperture library.
- 4 Depending on your selection, click Repair or Rebuild.

Aperture either fixes file permissions within the library or repairs or rebuilds the library, and then opens the application workspace.

Customizing the Aperture Workspace

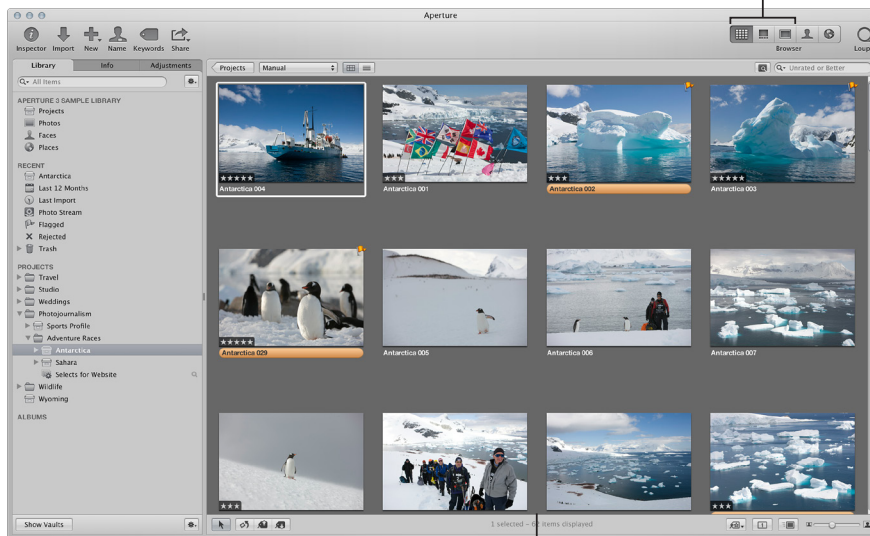
26

Changing Main Window Layouts

When a project, album, or folder is selected in the Library inspector, Aperture offers three basic layouts for the main window:

- *Browser*: Use this layout to display image thumbnails in an enlarged Browser so you can review photos, perform initial rating passes, and create and work with stacks of photos.

Layout buttons: Click a button to select a main window layout.



Browser layout: The Browser fills the workspace and displays a grid of thumbnail images.

- **Split View:** Use this layout to display both the Browser and Viewer together and use them in combination to review and work with photos.



Split View layout: The Viewer and Browser appear together.

- **Viewer:** Use this layout to display photos in an enlarged Viewer and work with them in detail.

Viewer layout: The Viewer fills the workspace and displays your photo selection.



Tool strip: Use these tools to adjust and work with your photos.

You can switch between layouts by pressing V, choosing commands from the View menu, or clicking buttons in the toolbar.

To change the main window layout

Do one of the following:

- Choose Browser, Split View, Viewer, or Cycle View Mode from the View menu (or press V).
- Click the Browser, Split View, or Viewer button in the toolbar.

Setting Aperture Preferences

An Overview of Aperture Preferences

Aperture provides a Preferences window for specifying settings that control the location of the Aperture library, the appearance of the Aperture window, the application used to import photos onto your computer, how photos are exported out of Aperture, how color labels are defined, how preview images are generated, as well as additional advanced settings. By taking time to specify your preference settings, you can speed up your workflow.

The Aperture Preferences window contains the following controls:



- *General button:* Click this button to display options for setting the location of the library, setting the length of time to keep track of recently imported photos, automatically stacking new versions of the same photo together, enabling scrolling with the mouse to navigate through photos in the Viewer, enabling face detection, and enabling gestures when using a Multi-Touch trackpad or Magic Mouse. For more information, see [General Preferences](#) on page 591.
- *Appearance button:* Click this button to display options for customizing the Aperture interface, including setting the background brightness level for the Browser, the Viewer, and Full Screen view, choosing which display to view slideshows on, and displaying tooltips and badges. For more information, see [Appearance Preferences](#) on page 592.
- *Import button:* Click this button to specify what Aperture should do when a camera is connected to your computer, whether photos should be imported into a new project or into the item selected in the Library inspector, and the length of time used to determine when to automatically split projects. For more information, see [Import Preferences](#) on page 593.
- *Export button:* Click this button to display options for selecting an external editor for changing your photos, audio, and video outside of Aperture, as well as specifying the email application and settings you want used when emailing photos. You can also create a copyright statement that will be included in webpages that you create, as well as specify that photos exported from Aperture contain location information and Faces metadata (names you have assigned to people in your photos using Faces). For more information see [Export Preferences](#) on page 594.
- *Labels button:* Click this button to display options for assigning text to color labels. For more information, see [Labels Preferences](#) on page 595.
- *Previews button:* Click this button to display options for how Aperture creates and displays preview images. For more information, see [Previews Preferences](#) on page 595.
- *Photo Stream button:* Click this button to display options for turning on Photo Stream in Aperture, as well as setting Aperture to immediately upload photos to and download photos from Photo Stream. For more information, see [Photo Stream Preferences](#) on page 596.

- *Web button*: Click this button to display options for reviewing and updating albums that you've published to your Flickr and Facebook accounts online. For more information, see [Web Preferences](#) on page 596.
- *Advanced button*: Click this button to display options for specifying hot and cold area thresholds, adding tolerance to Auto Levels adjustments, choosing color or monochrome clipping overlays, and choosing to have Aperture look up photo location information automatically. For more information, see [Advanced Preferences](#) on page 597.

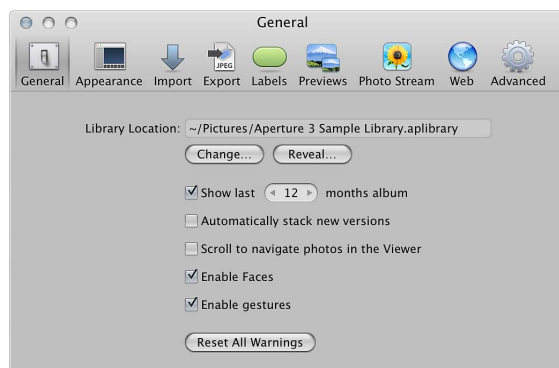
Opening Aperture Preferences

You can open the Aperture Preferences window at any time.

To open the Preferences window

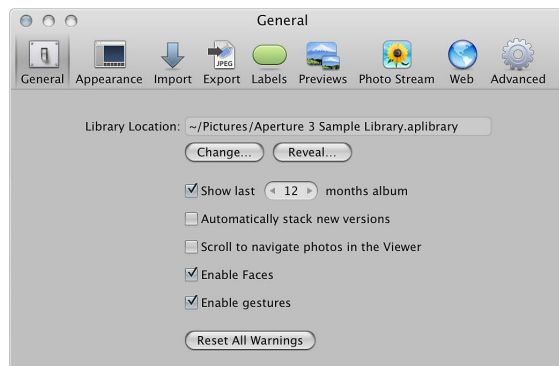
- Choose Aperture > Preferences, or press Command-Comma (,).

The Preferences window appears. For more information about the Aperture Preferences window, see [An Overview of Aperture Preferences](#) on page 590.



General Preferences

Use the controls in the General preference pane to set the location of the library, set the length of time to keep track of recently imported photos, enable face detection, automatically stack new versions of the same photo, and configure other photo management options.



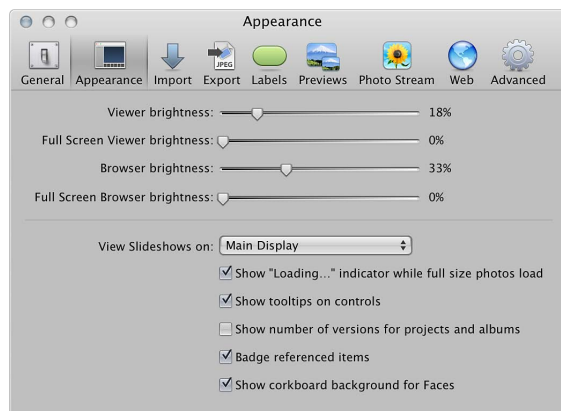
The General preference pane contains the following controls:

- *Library Location field*: Displays the default location of the library. To specify a custom location for the Aperture library, click Change and navigate to a location to store the library. Quit and reopen Aperture to complete the location change. Click Reveal to display the Aperture library file in the Finder.

- *“Show last [number] months album” checkbox*: Select this checkbox to add an item to the Recent section of the Library inspector that tracks recently imported photos. Use the value slider to set the number of months to keep track of the imported photos.
- *“Automatically stack new versions” checkbox*: Select this checkbox to automatically stack versions of the same photo as you create them.
- *“Scroll to navigate photos in the Viewer” checkbox*: Select this checkbox to enable scrolling with the mouse when the pointer is placed over the photo in the Viewer (or in the Viewer mode in Full Screen view).
- *Enable Faces checkbox*: Select this checkbox to enable face detection when importing photos into the Aperture library.
- *“Enable gestures” checkbox*: Select this checkbox to enable gesture functions in Aperture when using a Multi-Touch trackpad or Magic Mouse. For more information about the gesture functions supported in Aperture, see [Using Gestures with Aperture](#) on page 599.
- *Reset All Warnings button*: Click this button to display warning messages. If you have set Aperture to not display certain warnings, this button resets Aperture to display them again.

Appearance Preferences

Use the controls in the Appearance preference pane to customize the Aperture interface.



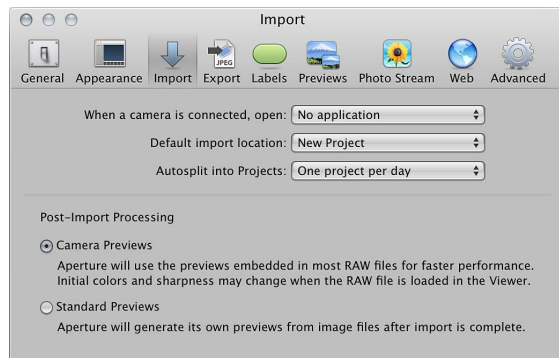
The Appearance preference pane contains the following controls:

- *“Viewer brightness” slider*: Adjust the Viewer background brightness using this slider.
- *“Full Screen Viewer brightness” slider*: Adjust the Full Screen view Viewer mode background brightness using this slider.
- *“Browser brightness” slider*: Adjust the Browser background brightness using this slider.
- *“Full Screen Browser brightness” slider*: Adjust the Full Screen view Browser mode background brightness using this slider.
- *“View Slideshows on” pop-up menu*: Choose to display slideshows in full-screen mode on your main display or secondary display. For more information about playing slideshows in full-screen mode, see [Viewing Your Slideshows in Aperture](#) on page 491.
- *“Show ‘Loading...’ indicator while full size photos load” checkbox*: Select this checkbox to have Aperture display an initial proxy image if there is any delay when loading a full-size photo.
- *“Show tooltips on controls” checkbox*: Select this checkbox to have Aperture display the names of interface items when you place the pointer over them.
- *“Show number of versions for projects and albums” checkbox*: Select this checkbox to have Aperture display the number of versions in a project or album in the Library inspector.

- “*Badge referenced items*” checkbox: Select this checkbox to have Aperture display badges that identify referenced images, audio clips, and video clips.
- “*Show corkboard background for Faces*” checkbox: Select this checkbox to display a corkboard in the background of Faces view.

Import Preferences

Use the controls in the Import preference pane to specify what Aperture should do when a camera is connected, whether to import photos into a new project or into the item selected in the Library inspector, and the length of time used to determine when to automatically split projects.



The Import preference pane contains the following controls:

- “*When a camera is connected, open*” pop-up menu: Specify which application should open when a camera is connected to your computer.
- “*Default import location*” pop-up menu: Specify whether Aperture imports photos into a new project or into the item selected in the Library inspector.
- “*Autosplit into Projects*” pop-up menu: Choose an option for automatically grouping imported photos in projects according to the time the photos were captured.
- *Camera Previews* button: Click this button to set Aperture to use the JPEG version of the RAW image file produced by the camera, if available. The advantage of this setting is that a sharp, high-resolution preview is available immediately upon import, even before the RAW image file is done being copied from the memory card to the computer. A color shift may occur after the RAW file’s preview is processed within Aperture. However, the first time the RAW image is shown in the Viewer, Aperture generates its own fully rendered preview and there is no further shifting.

Tip: Use this Camera Previews setting in conjunction with the Quick Preview mode to review your newly imported images instantly, with sharp previews and no processing. For more information, see [Navigating Through Photos in Quick Preview Mode](#) on page 83.

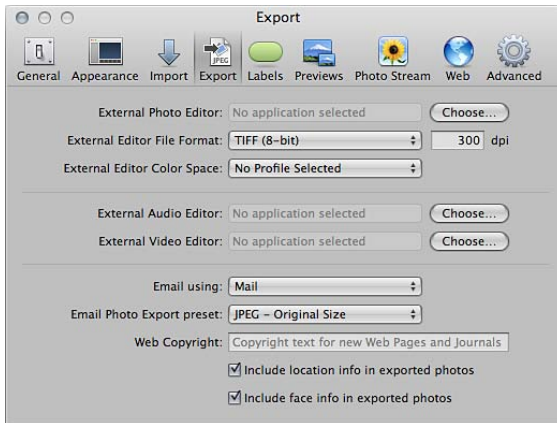
- *Standard Previews* button: Click this button to have Aperture generate a preview image for every image file immediately after import, using the settings in Previews preferences. When you select this option, Aperture uses its RAW decoding technology to create a fully rendered preview for every file in the import group, rather than waiting until the RAW image is selected and displayed in the Viewer. However, it may take a significant period of time to process the previews after importing a large group of RAW image files.

For more information, see [Previews Preferences](#) on page 595.

Important: The Camera Previews and Standard Previews settings apply only when Maintain Previews is turned on in the Library Action pop-up menu (with a gear icon) in the Library inspector.

Export Preferences

Use the controls in the Export preference pane to set the external editor, choose the email application used to email photos from within Aperture, and assign a copyright statement to webpages you create.



The Export preference pane contains the following controls:

- *External Photo Editor field:* You can use an external image editing application to make adjustments to your images. To identify an external editor, click Choose and select an application. To open a photo in the external editor, select the photo, then choose Photos > Edit with External Editor.
- *External Editor File Format pop-up menu:* Choose the file format in which to export a photo to an external editor. You can also specify the dot-per-inch (dpi) resolution of the photo in the dpi field.
- *External Editor Color Space pop-up menu:* Choose a color space in which to work with your photos in the external photo editor.
- *External Audio Editor field:* You can use an external audio editor to make adjustments to your audio clips. To identify an external editor, click Choose and select an application. To open an audio clip in the external editor, select the audio clip, then choose Photos > Edit with External Editor.
- *External Video Editor field:* You can use an external video editor to make adjustments to your video clips. To identify an external editor, click Choose and select an application. To open a video clip in the external editor, select the video clip, then choose Photos > Edit with External Editor.
- *“Email using” pop-up menu:* If you want to export items to an email client, choose the email application from this pop-up menu.
- *“Email Photo Export preset” pop-up menu:* Choose an export preset to use when exporting photos to your email client. If you want to create a custom export preset, choose Edit and create a new preset in the Image Export dialog.
- *Web Copyright field:* Enter copyright text for webpages and web journals here.
- *“Include location info in exported photos” checkbox:* Select this checkbox to include location metadata in exported photos.

- *“Include face info in exported photos” checkbox:* Select this checkbox to include Faces metadata (names you have assigned to people in your photos using Faces) in exported photos.

Labels Preferences

Use the text fields in the Labels preference pane to customize labels for each color.



Previews Preferences

Use the controls in the Previews preference pane to set how Aperture creates and displays preview images.



The Previews preference pane contains the following controls:

- *“New projects automatically generate previews” checkbox:* To set Aperture to create previews for the photos in all new projects and new libraries, select this checkbox. Deselect this checkbox if you don’t want previews created for photos in new projects.
- *“Share previews with iLife and iWork” pop-up menu:* Choose whether to enable sharing of JPEG preview images with iLife and iWork applications.
- *Photo Preview pop-up menu:* To set a maximum pixel size for your previews, choose a size from this pop-up menu.
- *“Photo Preview quality” slider:* To change the image quality of the previews, drag the slider. The higher the quality setting, the more disk space the previews require.

Photo Stream Preferences

Use the controls in the Photo Stream preference pane to turn My Photo Stream on or off for an Aperture library, as well as set options for automatically uploading and downloading photos between your photo stream and your Aperture library. You can also turn on photo stream sharing.

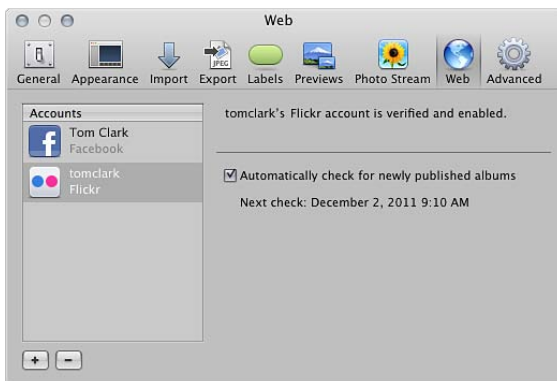


The Photo Stream preference pane contains the following controls:

- *My Photo Stream checkbox*: Select or deselect this checkbox to turn your photo stream on or off in the currently open Aperture library.
 - *Automatic Import checkbox*: Select this checkbox to have photos from your photo stream automatically imported into your Aperture library so that they appear in Projects view, Photos view, Faces view, and Places view. If you do not select this checkbox, you have to manually drag photos from your photo stream to projects in your Aperture library.
 - *Automatic Upload checkbox*: Select this checkbox to have all new photos that are imported into your Aperture library uploaded to your photo stream.
- *Shared Photo Streams*: Select this checkbox to share photo streams and view photo streams shared by others. Photos added to a shared stream are automatically pushed to the devices of people who subscribe to the shared stream.

Web Preferences

Use the controls in the Web preference pane to set options for reviewing and updating albums that you've published to your Flickr and Facebook accounts, as well as add or remove Flickr and Facebook accounts within Aperture.



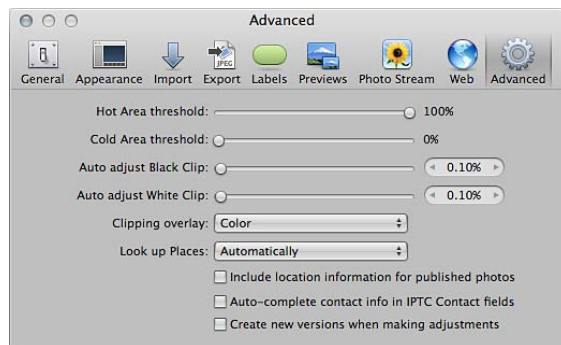
The Web preference pane contains the following controls:

- *Accounts column*: Select the account you want to modify in this column.
- *Add (+) button*: Click this button to add one or more Flickr and Facebook accounts.

- *Remove (-) button*: Click this button to delete the selected account from Aperture.
- **Important**: All albums associated with the deleted Flickr or Facebook account are removed from Aperture. However, the albums or sets and their photos still appear in the Flickr or Facebook account.
- *“Automatically check for newly published albums” checkbox*: Choose whether you want Aperture to check regularly for new albums published outside of Aperture to your Flickr or Facebook accounts or whether you want to update the accounts manually.

Advanced Preferences

Use the controls in the Advanced preference pane to specify the display threshold for hot and cold areas of images, add tolerance to Auto Levels adjustments, choose whether clipping overlays are displayed in color or monochrome, specify that Aperture look up photo location information when photos are imported, and specify that Aperture create a new version when you adjust an image.



The Advanced preference pane contains the following controls:

- *“Hot Area threshold” slider*: You can view an image’s hot areas (where highlight data in any color channel has been clipped) by choosing View > Highlight Hot & Cold Areas. To adjust the threshold used to determine an image’s hot areas, drag the slider.
- *“Cold Area threshold” slider*: You can view an image’s cold areas (where black data in any color channel has been clipped) by choosing View > Highlight Hot & Cold Areas. To adjust the threshold used to determine an image’s cold areas, drag the slider.
- *“Auto adjust Black Clip” slider*: Use the “Auto adjust Black Clip” slider and value slider to add tolerance to Auto Levels adjustments when evaluating colors beyond black.
- *“Auto adjust White Clip” slider*: Use the “Auto adjust White Clip” slider and value slider to add tolerance to Auto Levels adjustments when evaluating colors beyond white.
- *“Clipping overlay” pop-up menu*: Choose color or monochrome for the display of your clipping overlays.
- *“Look up Places” pop-up menu*: Specify that Aperture look up photo location information as the photos are imported.
- *“Include location information for published photos” checkbox*: Select this checkbox to have Aperture include any location information with the photos you share online.
- *“Auto-complete contact info in IPTC Contact fields” checkbox*: Select this checkbox to have Aperture automatically enter contact information in the IPTC Contact fields after you have entered the information the first time.
- *“Create new versions when making adjustments” checkbox*: Select this checkbox to have Aperture automatically create a new version when you adjust a selected photo. The adjustment is applied to the original version and the new one is left untouched.

Customizing the Toolbar

Hiding and Showing the Toolbar

The toolbar is shown by default, but you can choose to hide it.

To hide the toolbar

- Choose View > Hide Toolbar (or press Shift-T).

To show a toolbar that has been hidden

- Choose View > Show Toolbar (or press Shift-T).

Tip: You can also quickly hide or show the toolbar by clicking the Toolbar button (a gray, oblong button in the top-right corner of the Aperture main window).

Customizing Items in the Toolbar

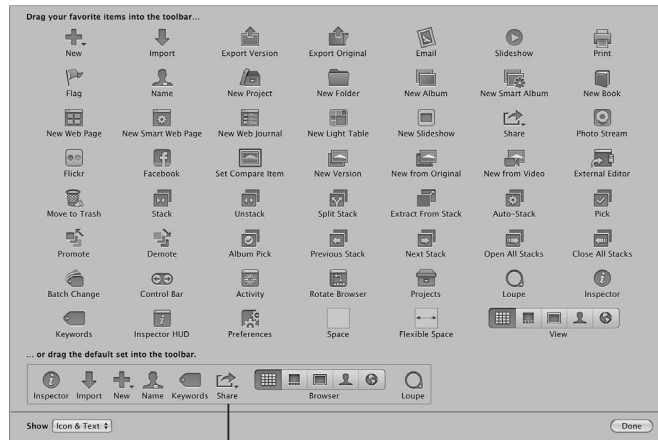
Aperture provides a simple drag-and-drop interface for adding, deleting, and rearranging the toolbar buttons and controls. You can also choose whether items in the toolbar appear as icons, as text, or as both.

To customize the toolbar

- 1 Do one of the following:

- Choose View > Customize Toolbar.
- Control-click the toolbar, then choose Customize Toolbar from the shortcut menu.

A dialog appears, showing icons for toolbar buttons and controls.



Default toolbar items are shown in the bottom section.

Note: Because you can customize the toolbar by adding and removing buttons and controls, your toolbar may look different from the one shown above.

- 2 Configure the toolbar by doing any of the following:

- *To add items to the toolbar:* Drag their icons from the dialog to the location where you want them to appear in the toolbar.
- *To remove items from the toolbar:* Drag items out of the toolbar, or Control-click the item you want to remove and choose Remove Item from the shortcut menu.
- *To change the order of the items in the toolbar:* Drag each item to its new position.

- *To control whether each item's icon and text appear in the toolbar:* Choose Text Only, Icon Only, or Icon & Text from the Show pop-up menu in the lower-left corner of the dialog, or Control-click the toolbar and choose Text Only, Icon Only, or Icon & Text from the shortcut menu.

3 When you finish configuring the toolbar, click Done.

To reset the toolbar to its default state

- Drag the default toolbar up from the bottom of the dialog into the toolbar area.

Using Gestures with Aperture

If your computer has a Multi-Touch trackpad or a Magic Mouse, you can use gestures when working with Aperture. For example, when working with photos in the Browser, you can use the rotate gesture to rotate images and the swipe gesture to select a different photo. In addition to the standard Multi-Touch trackpad gestures used with Mac portable computers, you can use Multi-Touch gestures with the following Aperture features.

Note: To use the following gestures, you must have Aperture 3.3.2 or later and OS X Mountain Lion v10.8 or later.

Feature	Multi-Touch trackpad gestures
Browser in grid view	<ul style="list-style-type: none"> • Use the pinch gesture to change the size of thumbnails in the Browser. • Use the rotate gesture to rotate the photo beneath the pointer. • Use the three-finger swipe gesture to select another photo when “Swipe with three fingers” is selected in the “Swipe between pages” pop-up menu in the More Gestures pane of Trackpad preferences. <p>For more information about the swipe gesture, see Help Center.</p>
Browser in list view	<ul style="list-style-type: none"> • Use the pinch gesture to change the size of thumbnails in the Browser. • Use the three-finger swipe gesture to select another photo when “Swipe with three fingers” is selected in the “Swipe between pages” pop-up menu in the More Gestures pane of Trackpad preferences. <p>For more information about the swipe gesture, see Help Center.</p>
Browser in filmstrip view (Split View layout) and filmstrip in Full Screen view (Viewer mode)	<ul style="list-style-type: none"> • Use the pinch gesture to change the size of thumbnails in the Browser or the filmstrip. • Use the rotate gesture to rotate the image beneath the pointer. • Use the three-finger swipe gesture to select another photo when “Swipe with three fingers” is selected in the “Swipe between pages” pop-up menu in the More Gestures pane of Trackpad preferences. <p>For more information about the swipe gesture, see Help Center.</p>

Feature	Multi-Touch trackpad gestures
Viewer and Full Screen view (Viewer mode)	<ul style="list-style-type: none"> • Use the pinch gesture to zoom in to or out of the photo, or double-tap with two fingers to zoom in to a specific part of the photo. • Use the rotate gesture to rotate the photo beneath the pointer. • Use the swipe gesture to select a different photo when “Scroll to navigate photos in the Viewer” is selected in the General pane of the Preferences window. <p>For more information about the General pane of the Preferences window, see General Preferences on page 591. For more information about the swipe gesture, see Help Center.</p>
Faces	<ul style="list-style-type: none"> • Use the pinch gesture to change the size of the snapshots.
Places	<ul style="list-style-type: none"> • Use two-finger scrolling to zoom in to or out of the map.
Light Table	<ul style="list-style-type: none"> • Use the pinch gesture to zoom in to or out of the Light Table or to change the size of the photo beneath the pointer.
Book Layout Editor	<ul style="list-style-type: none"> • Use the pinch gesture to zoom in to or out of the selected page or resize the object beneath the pointer on the page. (The Edit Layout button must be selected to resize objects on the page.) • Use the rotate gesture to rotate objects. You can also hold down the Shift key as you use the rotate gesture to restrict rotation to 15-degree increments. • Use the swipe gesture to change pages.
Slideshows	<ul style="list-style-type: none"> • Use the swipe gesture to display the next or previous slide during a slideshow.
Loupe tool	<ul style="list-style-type: none"> • Use the pinch gesture to change the Loupe size. (As with previous versions of Aperture, you can also use the scroll gesture to change the Loupe magnification.)
Crop tool	<ul style="list-style-type: none"> • Use the pinch gesture to modify an existing crop selection and change its size.
Straighten tool	<ul style="list-style-type: none"> • Use the rotate gesture to change the amount of image rotation.
Print dialog (Preview area)	<ul style="list-style-type: none"> • Use the pinch gesture to zoom in to or out of the photo displayed in the Preview area of the Print dialog.

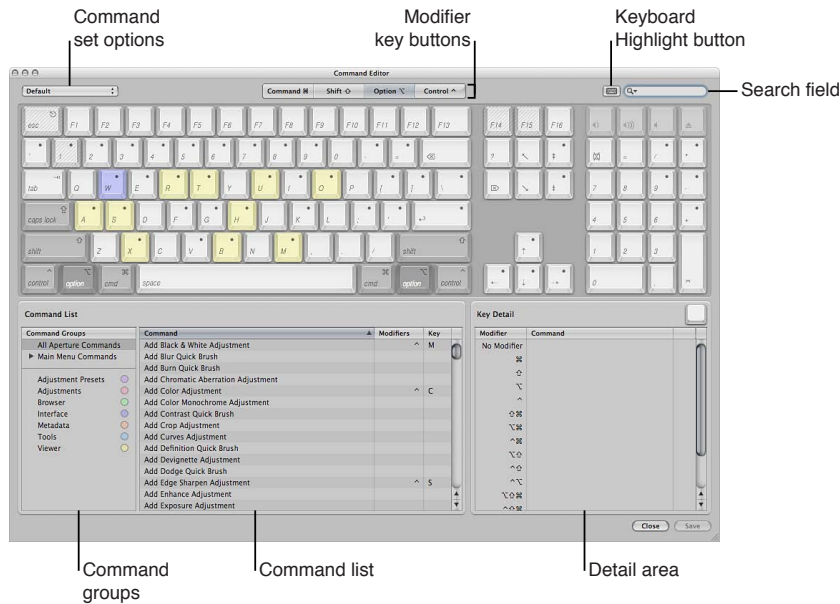
For more information about working with gestures, see Help Center.

Customizing Keyboard Shortcuts

An Overview of Customizing Keyboard Shortcuts

Aperture provides a wide variety of menu commands and keyboard shortcuts that let you control almost every aspect of your workflow. The Command Editor lets you search or browse the various commands and keyboard shortcuts in Aperture. In addition, the Command Editor lets you customize keyboard shortcuts so you can streamline the way you work.

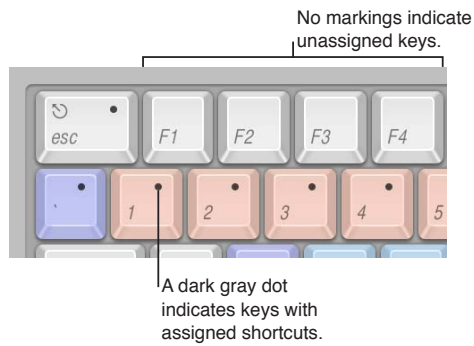
Use the Command Editor's search tools to find commands, view their descriptions and keyboard shortcuts, and preview highlighted key combinations in a visual representation of the keyboard. You can modify existing shortcuts, create new shortcuts, and save multiple sets of keyboard shortcuts, called *command sets*, that can be imported and exported for use by others. If you're more familiar with keyboard shortcuts from other applications, you can use the Command Editor to substitute keyboard shortcuts for the default set of Aperture keyboard shortcuts.



The upper half of the Command Editor displays a virtual keyboard. The lower half contains a command list that sorts menu commands by group and offers a brief description of each command, along with its associated keyboard shortcut, if one exists.

The virtual keyboard is color-coded to help you identify the type of command each key performs. The Command Groups column on the left side of the Command List area includes a clickable color key for reference.

Keys that are assigned to shortcuts are marked with a dark gray dot, whereas unassigned keys have no additional markings. Several keys are shaded with diagonal lines, indicating that they are reserved for OS X operating system use.



Choosing a Command Set

By default, Aperture uses a standard set of commands, with the language choice that you specified when you set up your computer.

To display the Command Editor in Aperture

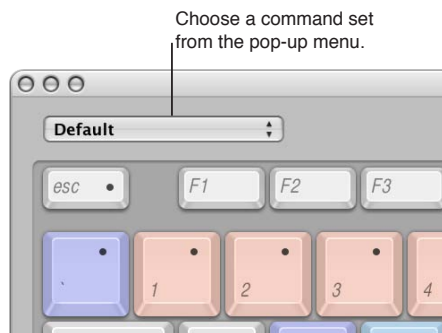
- Choose Aperture > Commands > Customize.

The Command Editor appears.

To choose a command set

Do one of the following:

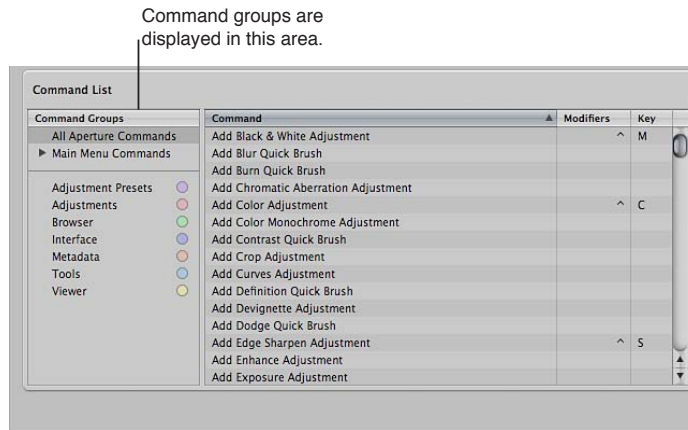
- Choose Aperture > Commands, then choose a command set from the submenu.
- If the Command Editor is already open, choose a command set from the pop-up menu in the upper-left corner.



Once you choose a command set, the keyboard shortcuts in the set become active in Aperture.

Viewing Keyboard Shortcuts by Group

The Command List area of the Command Editor displays several groupings of commands, organized by Aperture menus as well as by type of command. Click a group to have the Command list display only the commands and keyboard shortcuts in that group.



Searching for Commands

Use the search field in the upper-right corner of the Command Editor to quickly locate a command or its keyboard shortcut. You can search by command name, description, or keyboard shortcut.

To search for a keyboard shortcut

- In the Command Editor, click in the search field and type a word that describes the keyboard shortcut you need, or type the key combination.

The Command list immediately displays the search results, listing all commands and keyboard shortcuts related to the search term.

You can further narrow your search by choosing a category from the search field pop-up menu. The menu options include All, Command, Description, and Key Equivalent.

Note: Do not use the Shift key to capitalize letters when typing in the search field. The search field recognizes the Shift key as a modifier key in a keyboard shortcut.

To search for and highlight a keyboard shortcut on the virtual keyboard

You can use the search field in combination with the virtual keyboard to highlight keyboard shortcuts.

- 1 Click the Keyboard Highlight button to the left of the search field.

The keyboard is dimmed.

- 2 Click in the search field and begin typing.

The Command list changes as you type, highlighting the keys related to your search term.

Note: When you click the Keyboard Highlight button to turn on keyboard highlighting, modifier keys that may be part of the keyboard shortcut (Command, Shift, Option, and Control) are not highlighted.

Filtering the View by Modifier Keys

You can use the modifier key buttons (Command, Shift, Option, and Control) at the top of the Command Editor to quickly see which keys work in combination with the various modifier keys.

To filter by modifier keys

- 1 Click one of the four modifier key buttons at the top of the Command Editor (or click one of the modifier keys on the virtual keyboard).

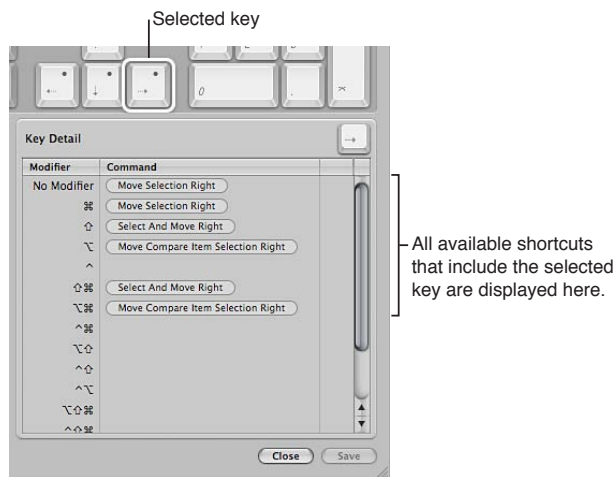
Keys assigned to work in combination with the selected modifier key appear marked with a dark gray dot.

- 2 If necessary, click another modifier key button (or a modifier key on the virtual keyboard) to create a combination.

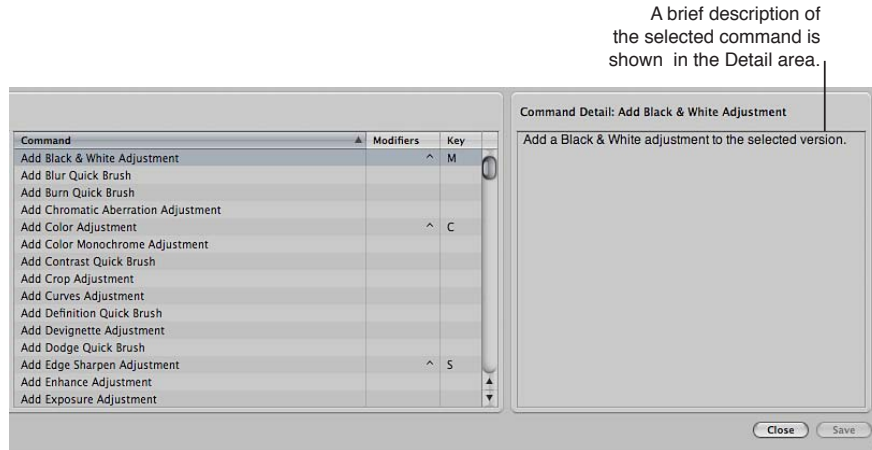
The virtual keyboard updates to show which keys are assigned to shortcuts that use the combined modifier keys.

Viewing Key and Command Details

The Detail area to the right of the Command List area provides additional information about a selected key in the virtual keyboard or a selected command in the Command list. When you select a key on the virtual keyboard, this area displays a list of all keyboard shortcuts associated with that key.



When you select a command in the Command list, the Detail area displays a brief description of the command.



Assigning Keyboard Shortcuts

Customizing keyboard shortcuts in the Command Editor is fast and easy. Because the default command set includes commands for which no shortcut is defined, you may want to apply a new shortcut to a command. Because you cannot modify the default command set, you must first duplicate that command set and then customize the new duplicate command set. After you make changes to the duplicate command set, you can save the changes.

To duplicate the currently active command set

- 1 Choose Duplicate from the pop-up menu at the top of the Command Editor.

A dialog appears and prompts you to name the new command set.

- 2 Type a name in the dialog, then click OK.

The new duplicate command set is saved and appears as an item in both the pop-up menu in the Command Editor and the Commands submenu of the Aperture menu.

To modify individual key assignments in the duplicate set of keyboard shortcuts, see the following steps.

To add or modify a keyboard shortcut

- 1 Using the search field (or browsing the Command list) of the Command Editor, select the command to which you want to assign a new keyboard shortcut.
- 2 Using your physical keyboard, press the combination of keys you want to use as a shortcut for the command (for example, Shift-Option-T).

Note: When you assign a key combination to a command, the Delete key becomes an assignable key when one of the modifier keys (Command, Shift, Option, or Control) is held down. See how to delete a command set below.

If the key combination is not already assigned to a command, the virtual keyboard updates to show the new key assignment. A gray dot appears on the newly assigned key or keys, and a color is applied if the command belongs to a color-coded command group.

If the key combination is already assigned to a command, Aperture displays the current assignment and prompts you to confirm the change.

To save a command set

- Click the Save button in the lower-right corner of the Command Editor.

If you close the Command Editor with unsaved changes, Aperture prompts you to save the command set.

To delete a command set

- 1 Make sure the command set you want to delete is the active command set, then choose Delete from the pop-up menu at the top of the Command Editor.

A dialog appears.

- 2 Click Delete.

The command set is removed, and the default command set becomes the active set of commands.

Importing and Exporting Command Sets

After you save a command set, you may want to export it to create a backup or to share the new command set with others. Exported command sets are saved in a file that you can import back into Aperture at a later time.

To export a command set

- 1 Make the command set you want to export the active set by choosing it from the pop-up menu in the top-left corner of the Command Editor.
- 2 Do one of the following:
 - Choose Aperture > Commands > Export.
 - In the Command Editor, choose Export from the pop-up menu.
- 3 In the dialog that appears, navigate to the location where you want to save the exported command set, then type a name in the Save As field.
- 4 Click Save.

The file is saved in the location you chose, with a .commandset file extension.

To import a command set

- 1 Do one of the following:
 - Choose Aperture > Commands > Import.
 - In the Command Editor, choose Import from the pop-up menu.
- 2 In the dialog that appears, navigate to the location where you have stored a command set file, select it, then click Open.

The imported command set is added to the Commands submenu of the Aperture menu and to the pop-up menu in the Command Editor.

If you are already using a command set with the same name, a dialog appears and prompts you to rename the imported command set.

Glossary

additive color Images with color elements derived from the light source itself. RGB is a common form of additive color. See also *RGB*.

adjustment Any change to the appearance of an image. See also *brushed adjustment*.

Adobe RGB (1998) A color profile commonly used for printing. See also *color space*.

album A type of container in the Aperture library that holds only versions. You can create albums at either the project level or within a project. There are specialized types of albums, including book, Light Table, webpage, web journal, and slideshow albums. See also *folder, library, project, Smart Album, version*.

alternate The photo immediately next to the pick in a stack. Alternate photos are useful when more than one photo in a stack merits the pick position. See also *image, pick, stack*.

Alternate setting A secondary Viewer setting that presents the currently selected photo on the secondary Viewer display. See also *display, image, main Viewer, primary selection, secondary Viewer*.

ambient light The lighting characteristics that already exist in the scene (indoor or outdoor) without any additional light supplied by the photographer.

analog-to-digital conversion The process of transforming light energy voltage values captured by the camera's digital image sensor into binary (digital numbers) for processing and storage. See also *digitization, quantization*.

angle of view The area of the scene displayed within the frame. Determined by the focal length of the lens.

aperture An adjustable iris or diaphragm in the lens through which light passes. Measured in f-stops. See also *f-stop*.

aperture priority A setting on certain cameras that automatically sets the shutter speed for a correct exposure based on the aperture setting provided by the photographer. See also *exposure, shutter priority*.

archive The process of storing image data on a permanent medium, such as optical media (CD or DVD).

aspect ratio The ratio of height to width of the dimensions of a photograph. Common North American aspect ratios are 3.5 x 5, 4 x 6, 5 x 7, 11 x 14, and 16 x 20 inches.

audio attachment An audio file that has been attached to a photo, either in the camera that captured the photo or within Aperture. Audio attachments are often audio notations recorded by the photographer while shooting a photo.

audio clip An instance of a segment of audio in Aperture; an audio file's version. See also *audio file, version*.

audio file The source media file on disk to which an audio clip in Aperture refers; the audio clip's original. See also *audio clip, original*.

autofocus The system within the camera that automatically focuses the lens on a specific portion of the subject or scene. See also *autofocus point overlays*.

autofocus point overlays Overlays displayed over photos in the Viewer that show which autofocus mode was used by the camera and which focal point was used to focus the photo when it was captured. You turn on autofocus point overlays by clicking the Autofocus Points button in the Camera Info pane of the Info inspector. You can also temporarily view autofocus point overlays by placing the pointer over the Autofocus Points button. See also *autofocus*.

automatic bracketing A setting on many professional cameras that automatically brackets the exposure of the photo. See also *bracketing*.

background The area in the rear of the image that appears behind the subject. See also *depth of field, foreground*.

backlighting A light source that faces toward the lens of the camera, emanating from behind the subject. Backlighting makes the outline of the subject stand out from the background, often resulting in a silhouette. See also *frontlighting, sidelighting, silhouette*.

badge overlay A small icon Aperture places on a photo to indicate that an adjustment, keyword, or other change has been applied to it. See also *adjustment, keywords, offline*.

Bayer pattern color filter array A specific arrangement of red, green, and blue lenses attached to the surface of a digital image sensor. There are roughly twice as many green lenses as blue and red to accommodate how the human eye perceives color. See also *charge-coupled device (CCD), complementary metal oxide semiconductor (CMOS), digital image sensor*.

bit depth The number of tonal values or shades of a color each channel in a pixel is capable of displaying. Increasing the bit depth of color channels in an image's pixels exponentially increases the number of colors each pixel can express. See also *color channels, color depth*.

Black & White adjustment An adjustment in Aperture that allows you to selectively control the source red, green, and blue color channels when a color image is converted to grayscale. See also *adjustment, grayscale, image, monochrome*.

black point compensation Black point compensation ensures that black and white luminance values are appropriately scaled to fit within the range or gamut of the destination device (printer, paper, and ink). Using black point compensation helps prevent clipping in shadows because the blacks are scaled to fit within the gamut of the printer, paper, and ink.

Black Point parameter An Exposure adjustment parameter in Aperture used to set the blacks in the image. See also *Exposure adjustment*.

Black setting A secondary Viewer setting that sets the secondary Viewer display to be a blank screen. See also *display, secondary Viewer*.

Blur Quick Brush A type of Quick Brush adjustment that softens the area of the image the adjustment is brushed on. See also *adjustment, Brush HUD, Quick Brushes*.

bounce lighting Natural and unnatural light sources (flash and tungsten) redirected toward the subject using a reflective surface to give the effect of natural light as well as fill-in shadows. See also *color temperature, fill-in lighting, White Balance adjustment*.

bracketing The process of taking three shots of the same photo based on the aperture and shutter values recommended by the light meter: a shot one stop under the recommended exposure, a shot at the recommended exposure, and a shot one stop over the recommended exposure. You can also narrow the bracketing range to fractions of a stop. Bracketing is used in difficult lighting situations to ensure that the scene is captured with the correct exposure. See also *automatic bracketing*.

Brightness parameter An Exposure adjustment parameter in Aperture used to lighten or darken an image. The adjustment affects the brightness values of the image's midtones the most. See also *adjustment, Exposure adjustment, midtones*.

Browser The part of the Aperture interface that displays the contents of the library, folders, projects, or albums. The Browser displays photos as a row of thumbnails (filmstrip view), a grid of thumbnails (grid view), or by file information (list view). See also *filmstrip view, grid view, list view, Viewer*.

Browser layout A main window layout in Aperture in which the Viewer is hidden. See also *Browser, Full Screen view, Split View layout, Viewer, Viewer layout*.

Browser mode (Full Screen view) A view mode in Full Screen view, similar to the Browser in the Aperture main window. When Full Screen view is set to Browser mode, photos are presented as thumbnails against a black background. Aperture provides controls for searching for and sorting the thumbnails in this mode. See also *Browser, Full Screen view, Library Path Navigator pop-up menus, Projects mode (Full Screen view), Viewer mode (Full Screen view)*.

brushed adjustment A type of adjustment in Aperture that is brushed on the image rather than applied to it all at once. Most adjustments can be brushed on an image. See also *adjustment, brushed adjustment overlay, Quick Brushes*.

brushed adjustment overlay A masking tool in Aperture used to identify brush strokes that have already been applied to an image. See also *Brush HUD, Quick Brushes*.

Brush HUD A floating window used to set the size of the brush, the softness of the brush's edges, and the strength of the brush stroke for the selected adjustment. The Brush HUD also contains controls for deleting brush strokes, working with overlays, limiting the adjustment to specific tonal ranges, and edge detection. See also *brushed adjustment overlay, Detect Edges, Quick Brushes*.

Bulb (B) A manual shutter speed setting on many cameras used for timed exposures. When the shutter is set to B, the shutter stays open until the photographer presses the shutter release button. See also *shutter, shutter speed*.

Burn Quick Brush A type of Quick Brush adjustment that darkens the area of the image the adjustment is brushed on. See also *adjustment, Brush HUD, Dodge Quick Brush, Quick Brushes*.

calibration The process of creating an accurate color profile for a device. Calibrating a device ensures accurate color translation from device to device. See also *device characterization*.

camera A photographic device usually consisting of a lightproof box with a lens at one end and either light-sensitive film or a digital image sensor at the other. See also *digital point-and-shoot camera, digital single-lens reflex (DSLR) camera*.

camera shake Blurring of the image caused by the combination of a slow shutter speed, a small aperture, and a long focal length. See also *aperture, shutter speed, tripod, unipod*.

candid shot Refers to a photograph of a person that appears to have been taken informally and unposed, without the subject's knowledge. See also *composition*.

capture a. The process of taking the image received by the digital image sensor and camera processor and storing that information on the memory card in the camera. b. The process of recording a photo in Aperture at the moment it is shot via a tethered camera. See also *camera, digital image sensor, image, memory card, tethered shooting*.

center-weighted metering A type of metering that measures the light in the entire viewfinder but gives extra emphasis to the center of the frame. Center-weighted metering is the most common type of metering in consumer cameras. See also *evaluative metering, light meter, spot metering*.

charge-coupled device (CCD) A type of digital image sensor that records the pixel information row by row. See also *complementary metal oxide semiconductor (CMOS), digital image sensor*.

Chromatic Aberration adjustment An adjustment in Aperture that corrects chromatic aberration, produced by certain lenses when the photo was shot. Some lenses refract light at specific focal lengths, resulting in a rainbow effect in the image. See also *adjustment, image, light*.

chromatic spread The extent of colors affected by the Hue, Saturation, and Luminance parameters in the Color adjustment. See also *adjustment, Color adjustment*.

Clone brush A type of Retouch brush in Aperture used to correct and obscure imperfections in an image by copying pixels from a similar-looking area of an image and pasting them over the area with the pixels you want to replace. See also *image, pixel, Repair brush, Retouch adjustment, retouching*.

close-up A photo in which the subject usually appears within 3 feet of the camera. For example, head shots are often referred to as close-ups. A shot of an ant on a flower's petal, where the ant fills a majority of the frame, is also a close-up.

CMYK A working space used for print pieces combining cyan, magenta, and yellow inks in different combinations to create a color that reflects the proper color of light. Black ink (K) is added to the photo last to generate pure black on the page. See also *subtractive color, working space*.

codec Short for *compressor/decompressor* or *encode/decode*. A software component used to translate video or audio from its analog uncompressed form to the digital compressed form in which it is stored on a computer's hard disk. Also referred to as a *compressor*. See also *audio file, video file*.

Color adjustment An adjustment in Aperture used to adjust hue, saturation, and luminance on a color-by-color basis, as well as chromatic range. See also *adjustment, chromatic spread, hue, luminance, saturation*.

color cast An unnatural tint in an image due to a lack of color balance. Color casts are often caused by artificial light sources such as interior lighting. Color casts in images are commonly removed by adjusting levels, tint, or white balance. See also *White Balance adjustment*.

color channels The individual channels into which color information for digital images is divided. Each individual color channel represents one of the three individual primary colors that combine to represent the final image. Each channel has a bit depth; most digital image files have 8 bits per channel, meaning that there are 256 levels of color for each channel. See also *bit depth, color depth*.

color depth The possible range of colors that can be used in an image. There are generally three choices with digital images: grayscale, 8-bit, and 16-bit. Higher color depths provide a wider range of colors but require more storage space. See also *bit depth*, *color channels*, *grayscale*.

colorimeter An instrument capable of measuring the color value of a sample, using color filters. A colorimeter is used to determine if two colors are the same. However, it does not take into account the light under which a sample is measured. Colorimeters are often used to calibrate displays and printers. See also *calibration*.

colorimetry The science of measuring color both objectively and perceptively.

color interpolation The process of calculating additional color values from light captured via the red, green, and blue elements on the digital image sensor.

color label A type of metadata that can be assigned in Aperture to help organize and filter photos. You can assign one of five color labels to a photo, as well as assign a specific meaning to each type of color label. See also *metadata*.

color management system (CMS) An application that controls and interprets the reproduction of color between devices and imaging software for accuracy. See also *ColorSync*.

color matching method (CMM) A software algorithm designed to translate color information from one device profile to another, such as from your display to your printer. ColorSync is a thoroughly integrated CMM used by OS X. See also *ColorSync*.

Color Monochrome adjustment An adjustment in Aperture that desaturates the image and applies a color tint of your choosing to the midtones. See also *adjustment*, *desaturate*, *image*, *midtones*, *monochrome*, *Tint adjustment*.

color space A mathematical model used to describe part of the visible spectrum. Color from one device is mapped from the device-dependent value to a device-independent value in a color space. Once in an independent space, the color can be mapped to another device-dependent space. See also *device dependent*, *device independent*.

ColorSync A color management system that is part of the Mac operating system. In OS X, ColorSync is thoroughly integrated with the entire operating system and is available to all native OS X applications. See also *color management system (CMS)*, *color matching method (CMM)*, *ColorSync Utility*.

ColorSync Utility A centralized application for setting preferences, viewing installed profiles, assigning profiles to devices, and repairing profiles that do not conform to the current ICC specification. See also *ColorSync*, *International Color Consortium (ICC)*, *profile*.

color temperature Describes the color quality of light. Color temperature is measured in units called *kelvins* (K). See also *kelvin (K)*, *White Balance adjustment*.

Commission Internationale de l'Éclairage (CIE) An organization established in 1931 to create standards for a series of color spaces representing the visible spectrum of light. See also *color space*, *device dependent*, *device independent*, *lab plot*.

compare photo In Aperture, a photo set to remain onscreen while other photos are viewed against it. The compare photo is indicated by a green border. See also *image*.

complementary metal oxide semiconductor (CMOS) A type of digital image sensor that is capable of recording the entire image provided by the light-sensitive elements in parallel (essentially all at once), resulting in a higher rate of data transfer to the storage device. Tiny colored microlenses are fitted on each light-sensitive element in a CMOS sensor to increase its ability to interpret light. See also *charge-coupled device (CCD)*, *digital image sensor*.

compositing A process in which two or more digital images are combined into one. See also *effects*.

composition The arrangement of visual elements in a scene.

compression The process by which digital image files are reduced in size. Lossy compression is the process of reducing digital image file sizes through the removal of redundant or less important image data. Lossless compression reduces file sizes by mathematically consolidating redundant image data without discarding it. See also *decompression*, *LZW compression*.

cones A type of receptor in the eye capable of perceiving color. There are three types of cone cells, each sensitive to a particular frequency range in the visible spectrum. Cone cells are capable of seeing either red, green, or blue colors. See also *rods*.

contact sheet Based on a print preset in Aperture, a printed selection of thumbnail-sized photos with or without associated metadata. Contact sheets in Aperture are similar in appearance to contact prints made by exposing negatives or transparencies against photographic paper.

contrast The difference between the brightness and color values in an image that allows the viewer to distinguish between objects in an image. High-contrast images have a large range of values, from the darkest shadow to the lightest highlight. Low-contrast images have a more narrow range of values, resulting in a “flatter” look. See also *Contrast parameter*, *Curves adjustment*, *density*, *flat*.

Contrast parameter An Enhance adjustment parameter in Aperture used to adjust the contrast in an image. See also *adjustment*, *contrast*, *Exposure adjustment*.

Contrast Quick Brush A type of Quick Brush adjustment that applies additional contrast to the area of the image the adjustment is brushed on. See also *adjustment*, *Brush HUD*, *contrast*, *Quick Brushes*.

control bar The control bar contains buttons and controls you can use to rate and navigate through images, as well as apply keywords to them. See also *keywords*, *rating*.

copyright The legal right to exclusive publication, production, sale, or distribution of a literary, musical, or artistic work. Typically, these rights are in effect for a specific period of time.

crop The process of printing or distributing only part of the original image. The general purpose of cropping an image is to create a more effective composition. Another reason for cropping an image is to make it fit a particular aspect ratio, such as 4 x 6. See also *adjustment*, *aspect ratio*, *composition*, *Crop adjustment*, *effects*.

Crop adjustment An adjustment in Aperture that trims the image for the purpose of changing the composition or modifying the aspect ratio. The Crop adjustment is used in conjunction with the Crop tool. See also *adjustment*, *aspect ratio*, *composition*, *crop*.

Curves adjustment An adjustment in Aperture that selectively remaps the tonal range of the image by applying a curve from input to output. Manipulating the curve modifies the tonal values in the image. See also *adjustment*, *contrast*.

decompression The process of creating a viewable image from a compressed digital image file. See also *compression*.

definition The clarity of details in an image. See also *resolution*.

Definition parameter An Enhance adjustment parameter in Aperture used to adjust the clarity of details in an image. See also *Enhance adjustment*.

Definition Quick Brush A type of Quick Brush adjustment that adds clarity and reduces haze without adding too much contrast to the area of the image the adjustment is brushed on. See also *adjustment, Brush HUD, definition, Quick Brushes*.

demote In Aperture, the process of moving a photo in a stack away from the pick position. See also *Full Screen view toolbar, image, pick, promote, stack*.

densitometer An instrument designed to measure the optical density of photographs. See also *device characterization*.

density The ability of an image to reproduce distinct dark colors. An image with high definition in the darker colors is referred to as *dense*. See also *contrast, flat*.

depth of field The area of the photo that appears in focus from the foreground to the background. Depth of field is determined by a combination of the opening of the aperture and the focal length of the lens. See also *aperture, background, focal length, foreground*.

desaturate To remove color from an image. Complete desaturation results in a grayscale image. See also *Black & White adjustment, grayscale, saturation*.

destination profile The working-space profile that defines the results of a color conversion from a source profile. See also *profile*.

Detect Edges A Brush HUD setting in Aperture that examines differences in pixel values to determine possible hard edges and then restricts the brush from affecting pixels beyond those edges, making it easier to paint adjustments into specific areas of the photo. See also *Brush HUD*.

device characterization The process of creating a unique, custom profile for a device such as a display or printer. Characterizing a device involves specialized dedicated hardware and software to determine the exact gamut of the device. See also *calibration, gamut*.

device dependent Describes color values that are contingent upon the ability of a device to reproduce those colors. For example, some colors produced by displays cannot be reproduced on paper by a printer. The colors produced by the display are outside the gamut of the printer. Therefore, those colors are considered to be device dependent. See also *gamut*.

device independent Describes standard color spaces, such as CIE Lab and XYZ, where the interpretation of a color is not dependent on a specific device. See also *color space, Commission Internationale de l'Eclairage (CIE)*.

Devignette adjustment An adjustment in Aperture used to correct unwanted vignetting applied to the image at the time it was captured. See also *Vignette adjustment, vignetting*.

diffused lighting A type of light that is scattered across the subject or scene. Diffused lighting results in a photo with low contrast and detail, as seen in photos shot outdoors on an overcast day. See also *contrast, flat*.

digital A description of data that is stored or transmitted as a sequence of ones and zeros. Most commonly, refers to binary data represented using electronic or electromagnetic signals. JPEG, PNG, RAW, and TIFF files are all digital. See also *digitization*.

digital image sensor The computer chip located at the image plane inside the camera that consists of millions of individual light-sensitive elements capable of capturing light. See also *camera, charge-coupled device (CCD), complementary metal oxide semiconductor (CMOS), megapixel*.

digital noise Misinterpreted pixels occurring as the result of high ISO settings; also known as *chrominance signal-to-noise ratio*. Random bright pixels, especially in solid colors, are the result of digital noise. See also *ISO speed, noise reduction*.

digital original file See *original*.

digital point-and-shoot camera A lightweight digital camera with a built-in autofocus feature, aptly named for the two steps required of the photographer to shoot a photo. The lens, aperture, and shutter are one assembly that is usually irremovable from the camera. See also *camera, digital single-lens reflex (DSLR) camera*.

digital single-lens reflex (DSLR) camera An interchangeable-lens camera where the image created by the lens is transmitted via a reflexing mirror through a prism to the viewfinder, and the viewfinder image corresponds to the actual image area. The mirror reflexes, or moves up, so as not to block the digital image sensor when the shutter is open. See also *camera, digital point-and-shoot camera*.

digitization The process of converting an analog voltage value to a digital value.

digitize A term often used by photographers for converting photos captured on film to a digital format, such as TIFF, using a film scanner.

disclosure triangle A small triangle you click to show or hide details in the Aperture interface.

display The computer's monitor.

distort Performing an adjustment that changes the shape or composition of an image. See also *effects*.

DNG A royalty-free RAW image format designed by Adobe Systems Incorporated. See also *format, RAW*.

Dodge Quick Brush A type of Quick Brush adjustment that lightens the area of the image the adjustment is brushed on. See also *adjustment, Brush HUD, Burn Quick Brush, Quick Brushes*.

dot gain A printing term used to describe the enlargement of halftone dots as ink is absorbed into paper. Dot gain can affect the quality of an image's appearance by reducing the amount of white reflected off the paper.

dots per inch (dpi) A printer resolution measurement that refers to the maximum number of dots within a square inch. See also *print, resolution*.

drift Changes in the way a device reproduces color over time. For example, the age of inks and the type of paper can cause a printer's color output to drift. See also *device characterization, gamut*.

drop shadow An effect that creates an artificial shadow behind an image. Typically used on websites and in photo albums to create the illusion of three dimensions.

Duplicate Version command A command in the Photos menu that duplicates the selected photo version with all applied metadata and adjustments. See also *adjustment, image, metadata, version*.

dust and scratch removal The process of digitally removing the blemishes caused by dust and scratches on film scans. See also *Retouch adjustment*.

dye sublimation A type of printer that creates images by heating colored ribbon to a gaseous state, bonding the ink to the paper. See also *inkjet printer, photo printer, print, RA-4*.

Edge Sharpen adjustment An adjustment in Aperture that sharpens the image based on luminance using multiple sharpening passes. See also *adjustment, image, Sharpen adjustment*.

editing The process of arranging and eliminating photos. See also *photo edit*.

effect preset A set of saved adjustment parameter settings. You can create new effect presets and rename, rearrange the order of, and delete existing effect presets. Effect presets appear in the Effects pop-up menu in the Adjustments inspector and the Adjustments pane of the Inspector HUD, and you can also access them by choosing Photos > Add Effect. See also *adjustment, effects*.

effects A general term used to describe the introduction of unnatural visual elements to enhance an image. See also *compositing, effect preset, filters*.

electromagnetic radiation A type of energy ranging from gamma rays to radio waves that also includes visible light. See also *light*.

embedded profile The source profile saved in the digital image file. JPEG, TIFF, PNG, and PDF file formats support embedded profiles. See also *device characterization, profile*.

emulsion The tiny layers of gelatin, consisting of light-sensitive elements, found in film. When the emulsion is exposed to light, a chemical reaction occurs. After the film is developed, an image appears. See also *dust and scratch removal, film*.

Enhance adjustment An adjustment in Aperture that adjusts contrast, definition, saturation, and vibrancy, as well as black, gray, and white tints in an image. See also *adjustment, contrast, Contrast parameter, definition, Definition parameter, saturation, Saturation parameter, tint, Tint adjustment, Vibrancy parameter*.

evaluative metering A type of metering that operates by dividing the frame into several small segments, taking a reading from each individual segment, and processing the average of the total segments to recommend the best exposure value for the overall photo. See also *center-weighted metering, light meter, spot metering*.

EXIF Short for *Exchangeable Image File*. The standard format for storing information—such as shutter speed, aperture, white balance, exposure compensation, metering setting, ISO setting, date, and time—about how a photo was shot. See also *IPTC, metadata*.

export The process of formatting data in such a way that it can be understood by other applications. In Aperture, photos can be exported in their native RAW format, as well as in JPEG, TIFF, PNG, and PSD formats. The EXIF and IPTC metadata associated with a photo can be exported as well.

exposure The amount of light in a photo. Exposure is controlled by limiting the intensity of light (controlled by the aperture) and the length of time light comes into contact with the digital image sensor (controlled by the shutter). Exposure affects the overall brightness of the photo as well as its perceived contrast. See also *adjustment, aperture, contrast, digital image sensor, Exposure adjustment, shutter*.

Exposure adjustment An adjustment in Aperture that adjusts exposure, recovery, black point, and brightness. See also *adjustment, Black Point parameter, Brightness parameter, exposure, Recovery parameter*.

exposure meter See *light meter*.

extended desktop mode A setting in System Preferences that allows the OS X desktop to span multiple displays. See also *display, mirroring*.

external editor An application used in tandem with Aperture to perform advanced adjustments, such as compositing. Aperture creates a new original when an image is sent to an external editor and automatically retrieves the original when the image is saved. See also *compositing, original*.

external flash A type of flash connected to the camera via the hot-shoe bracket or PC terminal. Using an external flash is the best technique for avoiding the red-eye effect in your subject's eyes. See also *flash, red-eye*.

face detection The process Aperture uses to determine if a face appears in a photo. See also *Faces view*.

face recognition The process Aperture uses to keep track of faces you have identified in your photos and suggest other possible matching faces in the same Aperture library. See also *Faces view*.

Faces view An Aperture view that displays snapshots of people in photos in the library or in an item selected in the Library inspector that have been assigned names. See also *face detection, face recognition, Flagged view, Photos view, Places view, Projects view, skimming*.

fill-in lighting The use of an artificial light source, such as daylight lamps or flash, to soften a subject or fill in shadows. See also *bounce lighting, color temperature, White Balance adjustment*.

film A flexible transparent base coated with a light-sensitive emulsion capable of recording photos. See also *dust and scratch removal, emulsion*.

filmstrip An interface element in Full Screen view that allows you to scroll through and search for photos. See also *Full Screen view*.

filmstrip view A Browser view that allows you to quickly scroll through thumbnail images horizontally. See also *Browser*.

Filter HUD A floating window used to quickly locate photos in the Browser based on a combination of criteria, such as adjustments, keywords, ratings, and EXIF metadata. See also *EXIF, image, keywords, rating*.

filters a. Modifiable search criteria used in the Filter HUD to return a specific selection of photos. b. Effects applied in Photoshop that affect the visual quality of the image to which they're applied. c. A colored piece of glass or plastic designed to be placed in front of a camera lens to change, emphasize, or eliminate density, reflections, or areas within the scene. See also *compositing, density, effects*.

Finder The part of the Mac operating system software that keeps track of files, applications, and folders and displays the desktop.

finishing The process of applying the final adjustments to a digital image just before presentation. Finishing may involve applying an additional gamma adjustment upon export, or using an external editor to either burn or dodge a portion of the image before sending it to the printer. See also *export*, *external editor*.

FireWire The trademarked Apple name for the IEEE 1394 standard, a fast and versatile interface used to connect external devices to computers. FireWire is well suited to transferring large amounts of data, and FireWire devices such as hard drives are often used to provide additional storage space. Aperture vaults are commonly stored on external FireWire hard drives. See also *tethered shooting*, *USB*, *vault*.

fixed lens See *prime lens*.

flag A type of metadata assigned in Aperture used to help filter photos. You can flag photos and then search for and display photos in Aperture based on whether they are flagged or not. See also *Flagged view*, *metadata*.

Flagged view An Aperture view that displays all photos, audio clips, and video clips in the library that have been flagged. See also *Faces view*, *flag*, *Photos view*, *Places view*, *Projects view*.

flash A device either on or attached to the camera that emits a brief, intense burst of light when the shutter release button is pressed. Flashes, synchronized with the shutter, are used to obtain a correctly exposed photo in low-light situations. See also *exposure*, *external flash*, *fill-in lighting*, *hot shoe*.

flat The lack of density in a photo when the contrast is too low. See also *contrast*, *density*.

Flip adjustment An adjustment in Aperture that inverts the composition of the image horizontally, vertically, or both. See also *adjustment*.

focal length The distance from the rear nodal point of the lens to the point where the light rays passing through the lens are focused onto the image plane—the digital image sensor. Focal lengths are measured in millimeters (mm).

focus point overlays See *autofocus point overlays*.

folder A type of container in the Aperture library used to organize projects and albums within projects. Folders do not contain photos, video clips, or audio clips. See also *album*, *library*, *project*.

foreground The area of the image between the subject and the camera. See also *background*, *depth of field*.

format a. *File format*: A specific method of encoding information. Most well-known file formats, such as TIFF and PNG, have published specifications. b. *Disk formatting*: The preparation of a hard disk or other storage medium for use with a file system. See also *JPEG*, *PNG*, *PSD*, *TIFF*, *vault*.

frame The border of an image. *Frame* can also be used as a verb to describe the process of constructing a composition within a specific image area. See also *crop*.

frontlighting A light source, emanating from the direction of the camera, that faces toward the subject. See also *backlighting*, *sidelighting*.

f-stop The ratio of the focal length of the lens to the diameter of the opening of the aperture. See also *aperture*.

Full Screen view A workspace view in Aperture with minimal user interface, used to view full-screen photos in high resolution with the least amount of light and color interference. See also *Browser layout, filmstrip, HUD, Split View layout, Viewer layout*.

Full Screen view toolbar A collection of buttons and tools, grouped by function, located at the top of the screen in Full Screen view. See also *toolbar*.

gamma A curve that describes how the middle tones of an image appear. Gamma is a nonlinear function often confused with brightness or contrast. Changing the value of the gamma affects middle tones while leaving the whites and blacks of the image unaltered. Gamma adjustment is often used to compensate for differences between Mac and Windows video cards and displays. The Mac Standard gamma is 1.8; the PC Standard is 2.2.

gamut The range of colors an individual color device is capable of reproducing. Each device capable of reproducing color has a unique gamut determined by age, frequency of use, and other elements such as inks and paper. See also *device characterization, device dependent, gamut mapping, ICC profile*.

gamut mapping The process of identifying colors outside a device's gamut and then calculating the nearest color within its gamut. Gamut mapping is used when receiving color information from another color space. See also *color space, gamut*.

Global Positioning System (GPS) A U.S. space-based navigation system that provides reliable positioning, navigation, and timing services for civilian users on a continuous, worldwide basis. Aperture uses photo location information provided by GPS-enabled cameras to plot where each image was shot on a map in Places view. See also *GPS track log, Places view*.

GPS track log A file consisting of digital bread crumbs that are used to define a path or route ("track") using precise coordinates saved by a GPS device or GPS tracking iOS application. If you have a GPS-enabled camera or iOS device or another GPS device that you use to create track files and save waypoints, you can import the track files into Aperture and work with them in Places view. See also *Global Positioning System (GPS), Places view, waypoint*.

grayscale Describes an image whose only colors are shades of gray. Usually grayscale images have smaller file sizes because less information is required to display a gray pixel, in which the red, green, and blue pixel elements all emit an equal intensity. See also *Black & White adjustment, monochrome, pixel*.

grid view A Browser view that displays photos as a grid of thumbnails. Grid view is the Browser's default view. See also *Browser, filmstrip view, list view*.

Halo Reduction Quick Brush A type of Quick Brush adjustment used to remove the blue and purple fringes that are occasionally produced with certain lenses when the image is overexposed. See also *adjustment, Brush HUD, Quick Brushes*.

high-definition video Generally refers to video that is 720 progressive scan lines or better, also known as *HD video*.

highlights The brightest areas of the subject or scene. See also *contrast, density, shadows*.

Highlights & Shadows adjustment An adjustment in Aperture used to selectively adjust the highlights and shadows in an image. See also *adjustment, highlights, shadows*.

hot shoe An apparatus at the top of a camera designed to hold a portable flash. When the shutter release button is pressed, an electric signal is transmitted through a connection in the hot shoe to activate the portable flash. See also *external flash, flash*.

HUD Short for *heads-up display*. In Aperture, HUDs are floating windows that allow you to work on your image. You can open and then move a HUD wherever you wish, based on your display setup. See also *Full Screen view*.

hue An attribute of color perception; also known as *color phase*. For example, red and blue are different hues. See also *Color adjustment*.

ICC profile Created as a result of device characterization, the ICC profile contains the data about the device's exact gamut. See also *device characterization, gamut, International Color Consortium (ICC)*.

image An artifact that reproduces the likeness of some subject, usually a physical object or person, also known as a *picture*. See also *photograph, photo selection, picture, subject*.

importing The process of bringing digital image files, audio files, and video files of various types into a project in Aperture. Imported files can be created in another application, downloaded from a camera or card reader, or brought in from another Aperture project. See also *project*.

inkjet printer A type of printer that creates images by spraying little ink droplets onto the paper. See also *dye sublimation, photo printer, print, RA-4*.

Inspector HUD A floating window that contains the Library, Metadata, and Adjustments panes. See also *Inspector pane*.

Inspector pane An element of the Aperture main window that contains the Library, Info, and Adjustments inspectors. See also *Inspector HUD*.

Intensify Contrast Quick Brush A type of Quick Brush adjustment that corrects the shadow areas of the image that appear washed out by intensifying the contrast between pure black and 50 percent gray in the area of the image the adjustment is brushed on. The Intensify Contrast Quick Brush adjustment is equivalent to applying an Overlay blend. See also *adjustment, Brush HUD, contrast, Polarize Quick Brush, Quick Brushes, shadows*.

International Color Consortium (ICC) An organization established to create the color management standard known as the *ICC profile*. ICC profiles are universally accepted by hardware and software vendors because they're based on an open standard. See also *ICC profile*.

IPTC Short for *International Press Telecommunications Council*. IPTC metadata is used by photographers and media organizations to embed keywords (words describing the characteristics of the image, including the photographer's name) in the image files themselves. Large publishers typically use image management systems to quickly identify photos based on the IPTC information embedded in the image file. See also *EXIF, metadata*.

IPTC Core A defined set of metadata fields, primarily used by photographers and news media, built on Adobe's XMP technology. See also *IPTC, metadata, XMP sidecar file*.

iris See *pupil*.

ISO speed The relative sensitivity of film provided as a benchmark by the International Standards Organization (ISO). In digital cameras, the minimum ISO rating is defined by the sensitivity of the digital image sensor. When the ISO setting on the camera is increased, allowing the photographer to shoot in low-light situations, the camera amplifies the voltage received from the light-sensitive elements on the digital image sensor prior to converting the voltage signals to digital values. See also *digital image sensor, digital noise*.

JPEG Short for *Joint Photographic Experts Group*, JPEG is a popular image file format that lets you create highly compressed graphics files. The amount of compression used varies. Less compression results in a higher-quality image. JPEG files usually have a .jpg extension. See also *format, RAW + JPEG image pair*.

kelvin (K) A unit of measurement used to describe color values of light sources, based on a temperature scale that begins at absolute zero. See also *color temperature, White Balance adjustment*.

keywords Descriptive words about the subject in the photo that are added to photo versions and saved as metadata. See also *control bar, Keywords HUD, metadata, version*.

Keywords HUD A floating window containing a library of keywords that can be applied to a photo selection. See also *keywords, metadata, photo selection*.

lab plot A visual three-dimensional representation of the CIE Lab color space. See also *color space, ColorSync*.

lens A series of sophisticated elements—usually glass—constructed to refract and focus the reflective light from a scene at a specific point: the digital image sensor in a camera. See also *camera, digital image sensor, macro lens, prime lens, telephoto lens, wide-angle lens, zoom lens*.

Levels adjustment An adjustment in Aperture that provides controls to selectively adjust the tonal range of an image. See also *adjustment, image*.

library In Aperture, a container file that holds projects, folders, albums, originals, and versions. You organize items in the library, rename items, sort items, and so on using the Library inspector. By default, the Aperture Library file is located in your Pictures folder. See also *album, folder, merging libraries, original, project, version*.

Library Path Navigator pop-up menus A set of pop-up menus at the top-left corner of the screen in the Full Screen view Browser mode that are used to provide access to all the items in the Library inspector. See also *Browser mode (Full Screen view), Full Screen view, library*.

Lift & Stamp HUD A floating window that displays the attributes lifted from a photo. You can choose which attributes are stamped on a photo selection by deselecting the attributes you don't want to apply. See also *HUD, Lift and Stamp tools, photo selection*.

Lift and Stamp tools A pair of tools used in conjunction with the Lift & Stamp HUD to copy (lift) attributes, such as metadata and adjustments, from one photo and paste (stamp) them on a photo selection. See also *adjustment, Lift & Stamp HUD, metadata, photo selection*.

light Visible energy in the electromagnetic spectrum with wavelengths ranging between 400 and 720 nanometers. See also *electromagnetic radiation*.

light meter A device capable of measuring the intensity of reflective light. Light meters are used as an aid for selecting the correct exposure settings on the camera. Most cameras have internal light meters. See also *center-weighted metering, evaluative metering, meter, spot metering*.

Light Table An area in the Aperture main window that appears when you select a Light Table album. The Light Table provides a large open space where you can place a selection of photos for review and drag them to new positions, group them in different combinations, and resize them as needed. See also *album, Navigator button*.

list view A Browser view that displays photos in a list by name, icon, and accompanying metadata, such as rating, image dimensions, file size, and date, rather than as a row or grid of thumbnails. See also *Browser, filmstrip view, grid view, metadata, rating*.

Loupe A tool in Aperture used to magnify the area of the photo you place it over.

luminance A value describing the brightness of all color channels combined in a pixel.

LZW compression A lossless data-compression algorithm developed by Abraham Lempel, Jakob Ziv, and Terry Welch in 1984. LZW compression algorithms are typically used with JPEG and TIFF graphics files to reduce the file size for archiving and transmission at a ratio of 2.8:1. See also *compression, JPEG, TIFF*.

macro lens A type of lens used for extreme close-up photography. See also *camera, lens, prime lens, telephoto lens, wide-angle lens, zoom lens*.

main Viewer For systems with multiple displays, the main Viewer is used for displaying the Aperture application. See also *display, secondary Viewer*.

managed images Images whose originals are stored in the Aperture library. The locations of the originals are managed by the Aperture database. Managed image files are always online. See also *library, offline, online, original, referenced images*.

megapixel One million pixels. For example, 1,500,000 pixels equals 1.5 megapixels. See also *digital image sensor, pixel*.

memory card The device in the camera where digital image files are stored. See also *camera, capture*.

merging libraries The process of importing an Aperture library file and merging its contents into the library that is currently open in Aperture. See also *library*.

metadata Data about data; metadata describes how data was collected and formatted. Databases use metadata to track specific forms of data. Aperture supports both EXIF and IPTC metadata. See also *EXIF, IPTC*.

meter The process of using a light meter to calculate the appropriate exposure. See also *light meter*.

midtone The color values in an image between the highlights and shadows. See also *contrast, highlights, Highlights & Shadows adjustment, Levels adjustment, shadows*.

mirroring The process of showing the same photo on two or more displays. See also *extended desktop mode*.

Mirror setting A secondary Viewer setting that sets Aperture to present the same photo selection on the main and secondary Viewer displays. See also *display, mirroring, main Viewer, photo selection, secondary Viewer*.

moire pattern Refers to the type of visual pattern that is created by the interference of two grids overlaid on top of one another. Moire patterns can occur in photos taken with digital cameras when the linear pattern in the photo interferes with the linear pattern of the digital image sensor pixel array. The moire pattern often results from a weak anti-aliasing filter employed by the camera's image processor. See also *digital image sensor, RAW Fine Tuning adjustment*.

monitor See *display*.

monochrome An image presented in shades of a single color, such as the shades of gray in a black-and-white photograph. See also *Black & White adjustment, Color Monochrome adjustment, grayscale, image, photograph*.

Navigator button A button in the Light Table used to reposition the view when the contents of the Light Table are larger than your screen. See also *Light Table*.

negative Developed film with a reverse-tone image of the subject or scene. See also *dust and scratch removal, emulsion, film, positive*.

New Version From Original command A command in the Photos menu that creates a new version from the original corresponding to a selected photo, audio clip, or video clip. See also *original, version*.

noise See *digital noise*.

noise reduction The process of removing digital noise in a photo. See also *adjustment, digital noise, image, Noise Reduction adjustment, Noise Reduction Quick Brush*.

Noise Reduction adjustment An adjustment in Aperture that reduces digital noise in an image. See also *adjustment, digital noise, image, noise reduction*.

Noise Reduction Quick Brush A type of Quick Brush adjustment that removes digital noise in the area of the image the adjustment is brushed on. See also *adjustment, Brush HUD, digital noise, noise reduction, Quick Brushes*.

N-up printing The process of consolidating a multiple-page document on a single sheet of paper. See also *print*.

offline Describes photos whose originals are currently unavailable to Aperture. Offline photos appear in the Viewer and Browser with badge overlays displaying a red slash through them. Photos may be offline because the device containing the originals, such as a CD, DVD, FireWire drive, or server, is not connected to your computer or the original filenames have been modified in some way. To bring the photos online, you must reconnect them to their corresponding originals. See also *Browser, FireWire, online, original, preview images, Viewer*.

offset press A type of professional printer used for high-volume printing for items such as magazines and brochures. Offset printing presses deposit ink in lines of halftone dots to produce images on the page. See also *photo printer*.

Off setting A secondary Viewer setting that turns off the dual-display function. See also *display, secondary Viewer*.

online Describes photos whose originals are currently available to Aperture. See also *offline*.

opacity The level of an image's transparency.

optical zoom lens See *zoom lens*.

original The source media file that was copied from either your computer's file system or your camera's memory card. In Aperture, the original is never modified. Whenever a change is made to a photo, a video clip, or an audio clip, that change is applied to the version. Formerly known as the *master*. See also *memory card, project, version*.

overexposure The result of exposing a scene too long. Overexposed scenes appear too bright and lack adequate details in the shadows. See also *exposure, underexposed*.

panning a. Moving the camera along with a moving subject in order to keep the subject in the frame. Panning a fast-moving subject with a slow shutter speed usually causes the subject to remain relatively in focus, while the remaining areas of the scene are blurred or stretched in the direction of the camera movement. b. In Aperture, pressing the Space bar and dragging within an image to see other parts of the image when it is displayed at 100 percent size. See also *camera, image, Viewer*.

panorama Usually refers to a scenic landscape photo with a wide aspect ratio. Photographers often digitally combine, or “stitch,” multiple photos of the same scene to create a continuous panoramic photo. See also *aspect ratio*.

perceptual A type of render intent that compresses the total gamut from one device’s color space into the gamut of another device’s color space when one or more colors in the original image are out of the gamut of the destination color space. This preserves the visual relationship between colors by shrinking the entire color space and shifting all colors. However, colors that were in gamut also shift. See also *gamut, relative colorimetric, rendering intent*.

phase An attribute of color perception; also known as *hue*. See also *hue*.

photo edit The process of choosing selects from a group of photos, as well as rejecting photos that you don’t plan to use or publish. The more aggressively you cull undesirable photos from your working group of photos, the more time you save when you process the photos for display. See also *rating, Reject rating, Select rating*.

photograph An image created using a camera as a result of light interacting with a light-sensitive surface, usually film or a digital image sensor. See also *camera, digital image sensor, film, image, picture*.

photo printer A type of printer capable of producing photo-quality images. See also *dye sublimation, gamut, inkjet printer, offset press, print, RA-4*.

photo selection Refers to a photo or group of photos selected in the Browser or the Full Screen view filmstrip. A white rectangle surrounding a photo indicates it is selected. See also *Browser, Full Screen view, photograph*.

Photo Stream An iCloud service that uploads and stores the last 30 days of your photos and automatically pushes them to all your iOS devices and computers. Also a view in Aperture that displays all the photos that have been uploaded to Photo Stream from your iOS 5 devices and the Aperture library. See also *Faces view, Flagged view, Photos view, Places view, Projects view*.

Photos view An Aperture view that displays all the photos, audio clips, and video clips in the library. See also *Faces view, Flagged view, Photo Stream, Places view, Projects view*.

pick The photo that represents a stack. The pick is usually the best photo in the stack. See also *alternate, stack*.

picture A visual representation rendered on a flat surface or screen, such as a photograph. See also *image, photograph*.

Pictures folder Located in the Home folder, the Pictures folder is the default location for Aperture and iPhoto libraries. See also *library*.

pixel The smallest discernible visual element of a digital image. See also *megapixel*.

Places Path Navigator pop-up menus A set of pop-up menus located at the top-left corner of the screen in Places view that are used to navigate to locations on the map. See also *Places view*.

Places view A view in Aperture that allows you to apply location information to a photo selection and track the location of each shot using Google Maps. Photos captured with GPS-enabled cameras provide their location information automatically. See also *Faces view, Flagged view, Global Positioning System (GPS), photo selection, Photos view, Places Path Navigator pop-up menus, Projects view, waypoint*.

PNG Short for *Portable Network Graphics*. PNG is a bitmapped graphics file format that has been approved by the World Wide Web Consortium to replace patented GIF files. PNG files are patent and royalty free. See also *format*.

Polarize Quick Brush A type of Quick Brush adjustment that deepens the colors in the image by darkening the shadows and midtones while preserving the highlights in the area of the image the adjustment is brushed on. The Polarize Quick Brush adjustment is equivalent to applying a Multiply blend. See also *adjustment, Brush HUD, contrast, highlights, Intensify Contrast Quick Brush, midtones, Quick Brushes, shadows*.

polarizing filter A filter placed on the front of the camera lens that selectively transmits light traveling on one plane while absorbing light traveling on other planes. Polarizing filters are capable of reducing unwanted reflections on windows and shiny surfaces. Polarizing filters are also used to darken the sky. See also *filters*.

positive Developed film, where the tonal relationship of the subject or scene is the same on film as when viewed by the eye; also known as a *slide*. See also *dust and scratch removal, emulsion, negative*.

presets A saved group of settings, such as export, naming, print, and web export settings. Presets determine properties such as file format, file compression, filename construction, paper size, and ColorSync profile. Presets are usually defined for particular workflows and can be tailored to client specifications. See also *ColorSync*.

pressure-sensitive tablet An input device used in place of a mouse that consists of two parts: a flat surface for drawing (the interface that is connected to the computer) and a pen or stylus. The harder you press the stylus against the surface of the tablet, the thicker the line or brush stroke is. See also *Brush HUD, Quick Brushes*.

preview images JPEG images generated by Aperture that represent the original with any applied adjustments and associated metadata. Preview images are designed to be shared with other applications, such as iWork and iLife applications, and used in place of the high-resolution originals when they are offline. See also *adjustment, JPEG, metadata, offline, original*.

primary selection The most important photo in a photo selection. Adjustments are applied only to the primary selection in a photo selection. The primary selection is identified by a thicker white border. There can be only one primary selection in a photo selection. See also *adjustment, photo selection, Primary setting*.

Primary setting A Viewer setting in Aperture that limits metadata changes to only the primary selection in a multiple-photo selection. See also *filmstrip, metadata, photo selection, primary selection*.

prime lens A lens with a fixed focal length that cannot be changed.

print An image, such as a photograph, printed on paper. See also *dye sublimation, inkjet printer, N-up printing, photograph, RA-4*.

profile A compilation of data on a specific device's color information, including its gamut, color space, and modes of operation. A profile represents a device's color-reproduction capabilities and is essential to effective color management. See also *device characterization, gamut*.

program exposure An exposure mode on many automatic cameras in which the camera automatically sets the aperture and shutter values for a correct exposure. See also *exposure*.

project In Aperture, the top-level container that holds all the originals, versions, and metadata associated with your shoot. In the case of referenced images, the originals are stored in their current location rather than in the project within the library file. See also *album, folder, library, original, Projects mode (Full Screen view), Projects view, referenced images, version*.

Projects mode (Full Screen view) A view mode in Full Screen view, similar to the Projects view in the Aperture main window. All projects are displayed, and each project is represented by one large thumbnail of a photo within the project. You can position the pointer over a project thumbnail and drag to quickly skim the photos in the project. See also *Browser mode (Full Screen view), Full Screen view, project, Projects view, Viewer mode (Full Screen view)*.

Projects view An Aperture view that displays all the projects in the library. Each project is represented by one large thumbnail of a photo within the project. You can position the pointer over a project thumbnail and drag to quickly skim the photos in the project. See also *Faces view, Flagged view, Photos view, Places view, project, Projects mode (Full Screen view), skimming*.

promote The process of moving a photo in a stack closer to the pick position. See also *demote, pick, stack*.

PSD Short for *Photoshop Document*. PSD files are proprietary graphics files for Adobe Systems Incorporated. See also *format*.

pupil The part of the eye that contracts and expands depending on the amount of light; also known as the *iris*.

quantization The process of converting a value derived from an analog source to a discrete digital value. See also *digitization*.

Quick Brushes Used to apply selective adjustments to an image by brushing the adjustment over a portion of the image. See also *adjustment, brushed adjustment, brushed adjustment overlay, Brush HUD*.

QuickTime A cross-platform multimedia technology developed by Apple. Widely used for editing, compositing, web video, and more.

RA-4 A type of professional printer capable of printing digital files on traditional photographic paper. RA-4 printers use a series of colored lights to expose the paper; the colors blend together to produce continuous-tone prints. See also *dye sublimation, inkjet printer, photo printer, print*.

RAID Short for *Redundant Array of Independent Disks*. A method of providing photographers who have large photo libraries many gigabytes of high-performance data storage by formatting a group of hard disks to act as a single volume. The performance of a group of hard disks striped together as a RAID can be much higher than that of the individual disks.

RAM Short for *random-access memory*. A computer's memory capacity, measured in megabytes (MB) or gigabytes (GB), which determines the amount of data the computer can process and temporarily store at any moment.

rangefinder An apparatus found on many cameras that is used to help focus the image. See also *camera, viewfinder*.

raster image processor (RIP) A specialized printer driver that replaces the driver that comes with your printer. The RIP takes input from applications and converts, or rasterizes, the information to data that the printer understands so that it can put dots on a page. Software RIPs typically offer features not found in standard printer drivers.

rating In Aperture, the process of adding a value to a photo to indicate its quality in relation to other photos in a selection. See also *photo edit, Reject rating, Select rating*.

RAW The original bit-for-bit digital image file captured by the camera. See also *RAW + JPEG image pair*.

RAW Fine Tuning adjustment A set of adjustment parameters in Aperture used to control how Aperture decodes RAW image files. See also *moire pattern*.

RAW + JPEG image pair A photo captured by a professional digital camera and saved as both an individual RAW file and an individual JPEG file. You can set Aperture to import one file type or both file types in the pair. See also *JPEG, RAW*.

reciprocity The relationship between the aperture and the shutter that allows for correct exposures as a result of multiple shutter speed and aperture setting combinations. An increase in aperture and a decrease in shutter speed creates the same exposure as the previous aperture and shutter combination, and vice versa. See also *aperture, shutter*.

Recovery parameter An Exposure adjustment parameter in Aperture used to recover highlight detail. See also *Exposure adjustment*.

red-eye The phenomenon that gives people glowing red eyes in photographs. Red-eye is caused by the close proximity of the flash to the lens (especially built-in flash). See also *external flash, Red Eye Correction adjustment*.

Red Eye Correction adjustment An adjustment in Aperture that replaces red pixels with black, eliminating the red-eye effect. Used in conjunction with the Red Eye tool. See also *adjustment, pixel, red-eye*.

referenced images Images whose originals are stored outside of the Aperture library. See also *library, managed images, offline, online, original*.

Reject rating In Aperture, a negative rating applied to a photo as part of the photo editing process. See also *photo edit, rating, Select rating*.

relative colorimetric A rendering intent suitable for printing photographic images. It compares the highlight values of the source color space to that of the destination color space and shifts out-of-gamut colors to the closest reproducible color in the destination color space. This rendering intent can cause two colors, which appear different in the source color space, to be the same in the target color space, which is known as *clipping*. See also *gamut, perceptual, rendering intent*.

rendering intent The method by which colors that are out of gamut for a selected output device are mapped to that device's reproducible gamut. See also *gamut, perceptual, relative colorimetric*.

Repair brush A type of Retouch brush in Aperture used to correct and obscure imperfections in an image by copying pixels from a similar-looking area of an image and pasting them over the area with the pixels you want to replace. In addition to overwriting the pixels, the Repair brush resamples the pasted pixels to match the color, texture, and luminance of the pixels you replaced. See also *Clone brush, Retouch adjustment, retouching*.

resolution The amount of information a digital image is capable of conveying. Resolution is determined by the combination of file size (number of pixels), bit depth (pixel depth), and dots per inch (dpi). See also *bit depth, dots per inch (dpi), pixel*.

Retouch adjustment In Aperture, an adjustment used to correct or obscure imperfections in an image. Used in conjunction with the Retouch HUD, which provides a Clone brush and a Repair brush. See also *adjustment, Clone brush, Repair brush*.

retouching The process of altering an image to add or remove details. See also *Clone brush, compositing, effects, filters, Repair brush, Retouch adjustment*.

RGB Short for *Red, Green, Blue*. A color space commonly used on computers, in which each color is described by the strength of its red, green, and blue components. This color space directly translates to the red, green, and blue elements used in computer displays. The RGB color space has a very large gamut, meaning it can reproduce a wide range of colors. This range is typically larger than the range that printers can reproduce. See also *additive color*.

rods A type of receptor in the eye capable of perceiving luminance. Rods do not perceive color, but only levels of brightness. See also *cones*.

saturation The intensity of color in an image. Saturated colors are perceived to have a “purer” look, resulting from the absence of the color gray. See also *adjustment, desaturate*.

Saturation parameter An Enhance adjustment parameter in Aperture used to adjust saturation in an image. See also *adjustment, desaturate, Enhance adjustment, saturation*.

Saturation Quick Brush A type of Quick Brush adjustment that adds saturation to or removes it from the area of the image the adjustment is brushed on. See also *adjustment, Brush HUD, Quick Brushes, saturation*.

secondary Viewer The secondary Viewer is used to present photos on a second display, separate from the application workspace. The secondary Viewer has five settings: Mirror, Alternate, Span, Black, and Off. See also *Alternate setting, Black setting, display, main Viewer, Mirror setting, Off setting, Span setting*.

selective focus The process of isolating a subject by using an f-stop that produces a shallow depth of field. See also *depth of field*.

Select rating In Aperture, the highest rating that can be applied to a photo as part of the photo editing process. A Select rating is applied when you intend to display or distribute the photo. See also *photo edit, rating, Reject rating*.

sepia Describes a photograph with a brown tint. See also *photograph, Sepia Tone adjustment, Tint adjustment*.

Sepia Tone adjustment An adjustment in Aperture that changes a color image to sepia—allowing you to desaturate the color image to the level of sepia coloring you want. See also *adjustment, desaturate, image, sepia, Tint adjustment*.

shadows The darkest areas of a subject or scene. See also *contrast, density, highlights*.

Sharpen adjustment An adjustment in Aperture used to sharpen images. See also *adjustment*, *Edge Sharpen adjustment*, *image*.

Sharpen Quick Brush A type of Quick Brush adjustment that sharpens the area of the image the adjustment is brushed on. See also *adjustment*, *Brush HUD*, *Quick Brushes*.

shortcut menu A menu you access by holding down the Control key and clicking an area of the interface, or by pressing the right mouse button.

shutter A complicated mechanism, usually consisting of a blade or a curtain, that precisely controls the duration of time light passing through the lens remains in contact with the digital image sensor. See also *shutter speed*.

shutter priority A setting on certain cameras that automatically sets the aperture for a correct exposure based on the shutter speed set by the photographer. See also *aperture priority*, *exposure*.

shutter speed The length of time the shutter is open or the digital image sensor is activated or charged. Shutter speeds appear as fractions of a second, such as 1/8 or 1/250. See also *shutter*.

sidelighting Light that hits the subject from the side, perpendicular to the angle of the camera. See also *backlighting*, *frontlighting*.

silhouette A photo in which the subject is a solid dark shape against a bright background. Extreme backlighting, such as a sunset, can cause the silhouette effect when your subject is placed in the foreground. See also *backlighting*, *foreground*.

skimming The act of quickly navigating through photos of a person in Faces view or photos within a project in Projects view by slowly dragging over the thumbnail representing the person in Faces view or the project in Projects view. See also *Faces view*, *Projects view*.

Skin Smoothing Quick Brush A type of Quick Brush adjustment used to smooth a person's skin by subtly blurring wrinkles and skin pores in the area of the image the adjustment is brushed on. See also *adjustment*, *Brush HUD*, *Quick Brushes*.

slide See *positive*.

slider In Aperture, a control that can be dragged forward or backward to make an adjustment. Sliders can be found in the Adjustments inspector and the Adjustments pane of the Inspector HUD. See also *adjustment*, *HUD*, *Inspector HUD*.

slideshow An animated presentation of a series of photos. In Aperture, you can combine photos with music and video to create multimedia slideshows that you can play on your computer (using one or two displays) or export as slideshow movies.

Smart Album Dynamic albums in Aperture used to organize photos, audio clips, and video clips by gathering versions based on search criteria. See also *album*, *Smart Settings HUD*, *version*.

Smart Settings HUD A floating window used to specify search criteria, such as adjustments, keywords, ratings, and EXIF metadata, for the purpose of gathering photos that match into a Smart Album. See also *EXIF*, *keywords*, *rating*, *Smart Album*.

soft lighting See *diffused lighting*.

soft proof The onscreen simulation by a display of the expected output from a printer or press.

Sorting pop-up menu Used to arrange photos in the Browser based on a variety of sort properties or custom sort criteria. See also *Browser*.

source image file See *original*.

source profile The profile of an image file before it undergoes color conversion.

Span setting A secondary Viewer setting that splits the presentation of the current photo selection between the main and secondary Viewer displays. See also *main Viewer, photo selection, secondary Viewer*.

spectrophotometer An instrument that measures the wavelength of color across an entire spectrum of colors. Because it can be used to profile both displays and printers, the spectrophotometer is preferred for device profiling.

Split View layout A main window layout in Aperture that displays the Viewer and Browser at the same time. See also *Browser, Browser layout, Viewer, Viewer layout*.

Spot & Patch adjustment An adjustment in Aperture used to retouch imperfections in an image, such as sensor dust. See also *adjustment*.

spot metering A type of metering that operates by metering within a small target that is usually in the center of the frame. See also *center-weighted metering, evaluative metering, light meter*.

sRGB A common working space designed to represent the average PC monitor. Because of its small gamut, it is suitable for web graphics but not for print production. See also *working space*.

stack In Aperture, a set of similar photos, of which only one photo is intended for use. See also *alternate, pick*.

stopping down The process of changing the aperture, or f-stop, to a smaller opening. See also *aperture, f-stop*.

Straighten adjustment An adjustment in Aperture that levels the image's horizon. Used in conjunction with the Straighten tool. See also *adjustment*.

subject The main object, person, scene, or incident chosen by the photographer to be represented in a photo. See also *candid shot, photograph*.

subtractive color Images with color elements derived from the light reflected off the surface of an object. CMYK is a common form of subtractive color. See also *CMYK*.

SWOP Short for *Specifications for Web Offset Publications*, a standard printing-press profile. *Web* here refers to a web press, not to the Internet.

tabs In Aperture, elements that delineate projects, folders, or albums in the Browser when more than one is selected in the Library inspector. You click a tab to view the contents of a currently open project, folder, or album. See also *album, folder, project*.

target A reference file used to profile a device such as a scanner or digital camera. It often contains patches whose color values have been measured. The output from a device is then compared with the target. See also *device characterization*.

telephoto lens A lens with a long focal length that magnifies the subject. See also *lens*.

tethered shooting Refers to the process of connecting a digital camera to your Mac via a FireWire or USB cable, shooting photographs, and having Aperture capture and store the image files at the moment they are shot. See also *camera, FireWire*.

theme Professionally designed layouts in Aperture used for books, webpages, and slideshows. See also *slideshow*.

TIFF Short for *Tagged Image File Format*. TIFF is a widely used bitmapped graphics file format, developed by Aldus and Microsoft, that handles monochrome, grayscale images. See also *format*, *grayscale*, *monochrome*.

tint The shade of a color. See also *color cast*.

Tint adjustment An adjustment parameter in Aperture used to selectively remove color casts in the shadows, midtones, and highlights in an image. See also *adjustment*, *color cast*, *exposure*.

Tint Quick Brush A type of Quick Brush adjustment that shifts the tint in the area of the image the adjustment is brushed on. See also *adjustment*, *Brush HUD*, *Quick Brushes*, *tint*.

toolbar A collection of buttons and controls, grouped by function, located at the top of the Aperture main window. See also *Full Screen view toolbar*.

transition A visual effect applied between photos in a slideshow. In Aperture, you can choose the type and duration of the transition between photos. See also *slideshow*.

travel maps You can create travel maps using the Book Layout Editor if you select a book theme that includes travel maps. See also *Places view*.

tripod A stand with three legs used to keep a camera steady. The use of a tripod is especially necessary when shooting long exposures. See also *camera shake*, *exposure*.

tungsten light A type of light with a low color temperature. Tungsten light sources usually include household lamps but should not be confused with fluorescent lights. See also *color temperature*, *White Balance adjustment*.

underexposed The result of not exposing a scene long enough. Underexposed scenes appear dark. See also *exposure*, *overexposure*.

unipod Similar to a tripod; a stand with one leg used as an aid in keeping a camera steady. See also *camera shake*, *exposure*.

untagged A document or an image that lacks an embedded profile.

USB Short for *Universal Serial Bus*. A versatile interface used to connect external devices to computers. USB cables are often used to connect computers to computer peripherals, such as keyboards and digital cameras, as well as transfer large amounts of data. See also *camera*, *FireWire*, *tethered shooting*.

vault A designated storage space that contains an exact copy of the Aperture library (from the last time you backed up), usually saved on an external FireWire drive. See also *FireWire*, *library*.

version The file containing all the metadata and adjustment information for an image, a video clip, or an audio clip. In Aperture, only versions are changed. Aperture never changes originals. See also *original*.

Vibrancy parameter An Enhance adjustment parameter in Aperture used to add saturation in an image in a nonlinear manner. Saturated colors are left alone while saturation is added to all other colors. However, skin tones are not modified. See also *adjustment*, *desaturate*, *Enhance adjustment*, *saturation*.

Vibrancy Quick Brush A type of Quick Brush adjustment that adds saturation to or removes it from just the desaturated colors in the area of the image the adjustment is brushed on. Skin tones are not affected. See also *adjustment, Brush HUD, Quick Brushes, saturation*.

video clip An instance of a segment of video in Aperture; a video file's version. See also *version, video file*.

video file The source media file on disk to which a video clip in Aperture refers; the video clip's original. See also *original, video clip*.

Viewer An area in Aperture that displays the photos currently selected in the Browser. You can use the Viewer to perform adjustments on images as well as compare them with each other. See also *Browser*.

Viewer layout A main window layout in Aperture in which the Browser is hidden. See also *Browser, Browser layout, Full Screen view, Split View layout, Viewer*.

Viewer mode (Full Screen view) A view mode in Full Screen view, similar to the Viewer in the Aperture main window. When Full Screen view is set to Viewer mode, photos are presented at high resolution over a solid-color background. Viewer mode is ideal for performing image adjustments. See also *Browser mode (Full Screen view), Full Screen view, Projects mode (Full Screen view), Viewer*.

viewfinder The part of the camera designed to preview the area of the scene that will be captured by the digital image sensor. See also *camera, digital image sensor*.

Vignette adjustment An adjustment in Aperture designed to add a vignette effect to an image. See also *Devignette adjustment, vignetting*.

vignetting a. Darkening, also known as *falloff*, at the corners of an image as a result of too many filters attached to the lens, a large lens hood, or poor lens design. b. The process of applying a vignette to an image for artistic effect. See also *Devignette adjustment, filters, lens, Vignette adjustment*.

watermark A visible graphic or text overlay applied to a photo to indicate that the photo is protected by a copyright. Watermarks are applied to discourage the use of photos without the copyright holder's explicit permission.

waypoint A coordinate saved in a GPS track log representing a specific geographic location. In Aperture, waypoints can be assigned to photos in Places view. See also *GPS track log, Places view*.

White Balance adjustment An adjustment in Aperture that changes the color temperature and tint of a digital image. The goal of adjusting an image's white balance is to neutralize color casts in the image. For example, if the white in an image is too yellow because of incandescent lighting, white balancing adds enough blue to make the white appear neutral. The White Balance adjustment can also be used to neutralize color casts by identifying skin tones in the image. See also *color cast, color temperature, kelvin (K)*.

white point The color temperature of a display, measured in kelvins. The higher the white point, the bluer the white is; the lower the white point, the redder the white. The native white point for a Mac computer is D50 (5000 kelvins); for a Windows PC, it is D65 (6500 kelvins). See also *color temperature, kelvin (K)*.

wide-angle lens A lens with a short focal length that takes in a wide view. The focal length of a wide-angle lens is smaller than the film plane or digital image sensor. See also *digital image sensor, lens*.

working space The color space in which you edit a file. Working spaces are based either on color space profiles such as Apple RGB or on device profiles.

XMP sidecar file An extensible markup language designed by Adobe Systems Incorporated that is used for defining metadata sets for photo editing applications. Resources, such as adjustment parameters, can be saved in this file and passed on to other applications. See also *adjustment*, *IPTC*, *IPTC Core*, *metadata*.

zoom lens A lens that has the mechanical capacity to change its focal length; also known as an *optical zoom lens*. See also *lens*.

Zoom Viewer button A button in the Viewer and the Full Screen view toolbar that alternates the display of the photo selection between fitting the photos within the Viewer and presenting the photos at 100 percent size. See also *control bar*, *filmstrip*, *photo selection*, *Viewer*.