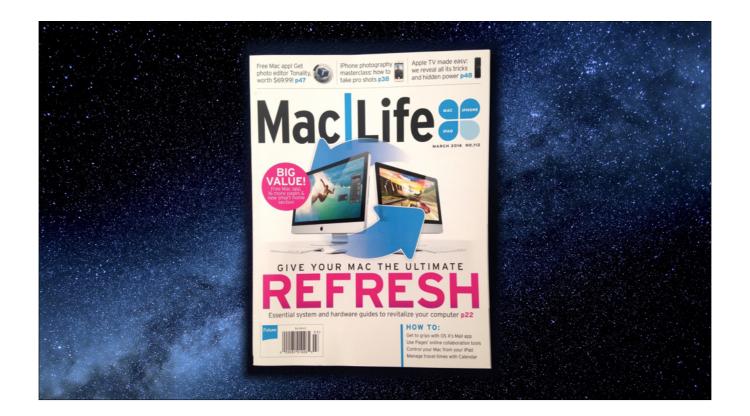




Over the years, digital photography has come a long, long way. Early digital cameras had a pixel resolution of less than 1/3 of one MegaPixel (MP). Then came cameras and projectors that were capable of XGA resolution (1024 x 768 pixels), or slightly over 3/4 of one MP. Later, cameras began to far exceed the capability of projection and/or TV system.

For example, this HDTV projector that we're using tonight has (1920 x 1080 pixels) about 2.1MP. And yet we see cameras now that often have more than 5 times the number of pixels found in HDTV!

So in this program, we'll explore what you can do in both shooting, then organizing your precious collection of digital photos using the basic program provided with virtually all Apple devices... "PHOTOS"



This month's issue of MacLife magazine has a great article on using you iPhone/iPad to shoot and edit your photographs.



The article begins with information on the capabilities of your built-in iPhone camera (or iPad camera), then...



...talks about ten steps to better "iPhoneography"... everything from exposure control to editing.



The various shooting modes that are available on your iOS device are explained.



 \ldots and finally there's some basic information about editing.



Tonight we'll begin with how do easily move the digital photos captured by your camera or iOS device, and collect, organize and store them using the software immediately available to all Apple users.

First a look at digital camera storage cards, and how to move their information to your computer or iPad/iPhone.

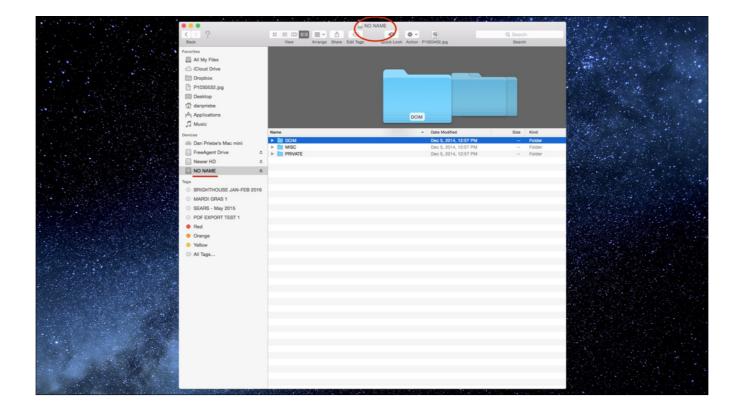
Most commonly, cameras use a flash memory card like this one in my "point & shoot" Lumix camera... an SD high capacity (HC) card.

The card shown can hold literally hundreds of high-quality photos. And it may be a good idea to consider using a micro-SD adapter (looks just like this card; same size etc.) that will allow you to use even a much smaller storage card. We'll talk more about the advantages of the micro SD card later.

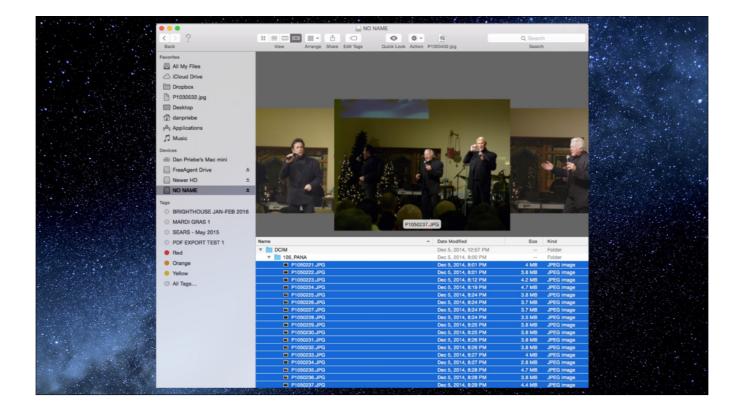


To import these photos into your Mac or iPad (or iPhone), you'll need to have an SD card reader. Some Macs have a built-in card reader (like the Macbook Air). Many do not. For those without a built-in card reader, there are dozens of readers available. The one shown, works only with SD cards, but there are many that read multiple sizes of memory cards, like those shown at left. For example one of my card readers will read the popular "COMPACT FLASH" cards used in larger digital cameras, as well as the popular SD cards. These readers connect to the USB port of your computer. Later we'll show you an adapter used to input card info directly into your iOS device (i.e. your iPad or iPhone).

When you connect your reader to your Mac, it will appear as an external drive. To access its contents in Finder, you simply double-click on the drive. If you want to import photos directly into your Mac's "PHOTOS" app, simply open the application, and the drive will be shown.



Here you see that I've opened the drive folder into Finder, so I can review, copy, and save the desired photos to any location on my Mac's system. The drive folder (as you can see) typically contains subfolders. In this case, the one named "DCIM" (**D**igital **C**amera **IM**ages) contains additional folders I'll look at.

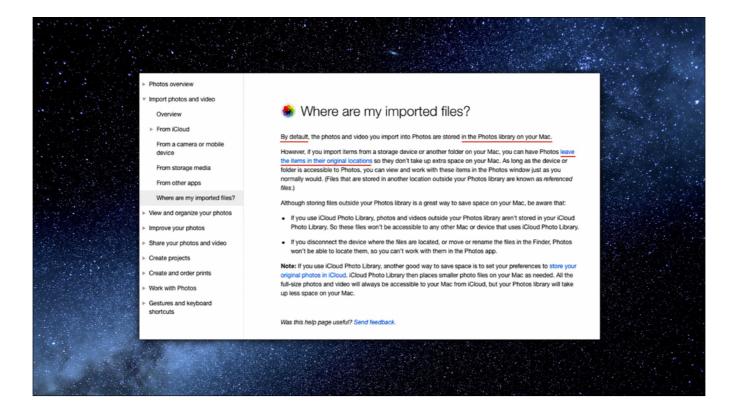


Opening one of the sub-folders will allow me to view, select, and copy to another location. Why would I want to do this?

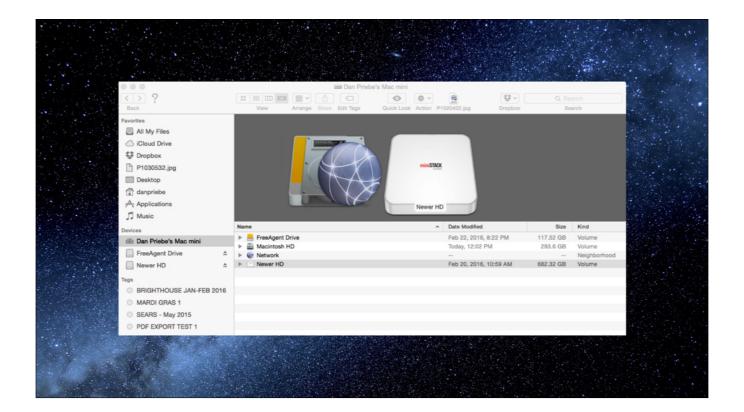


Because, if I choose to directly import the selected photos in to my "PHOTOS" app and it's default photos library....

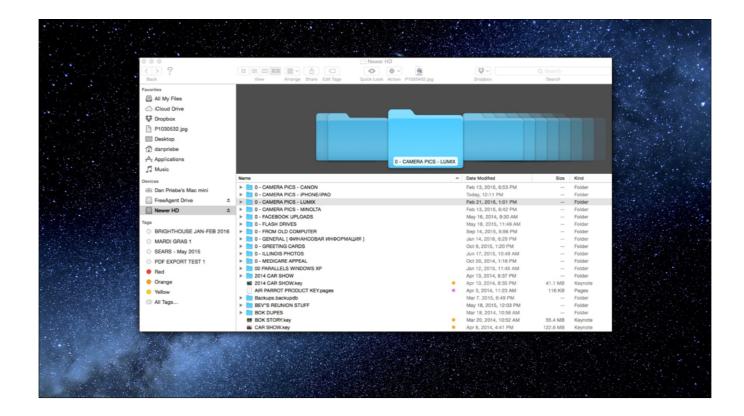
(NOTE: I can import photos into my older "iPhoto" app if I so choose. With OS X Yosemite, click the "Launch" icon. With El Capitan, search Applications to find the "iPhoto app. My photos will then be in separate libraries independent of one another.)



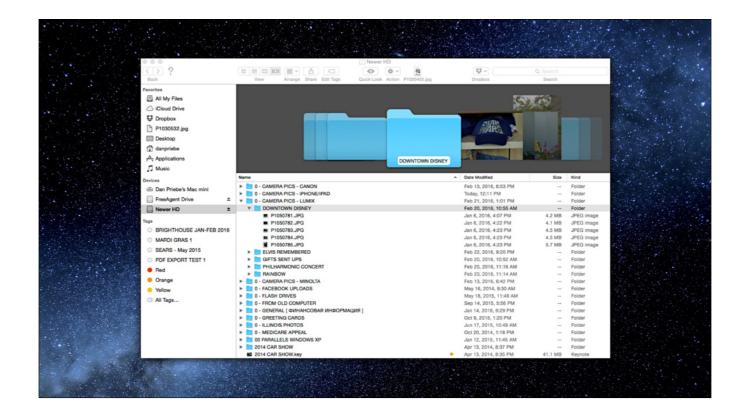
... by default, all photos will be stored in a library located on my Mac's hard drive. That may be okay, if I have lots of room on my Mac hard drive, or if I have relatively few photos or movie clips. Otherwise, by locating the original photos on an external hard drive, the library for those photos can be located on the external drive, thus taking up no significant space on my computer's main drive.



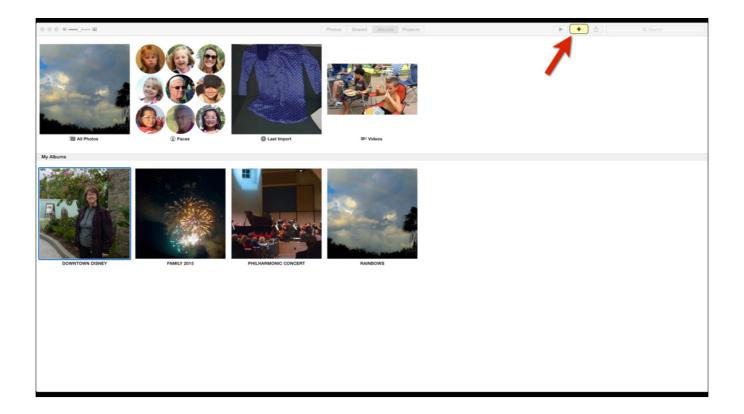
So what I personally prefer to do, since I have a very large number of photos and very little free space on my main hard drive, is to set up folders on my main external drive for locating files for photos captured from my various digital photo sources...



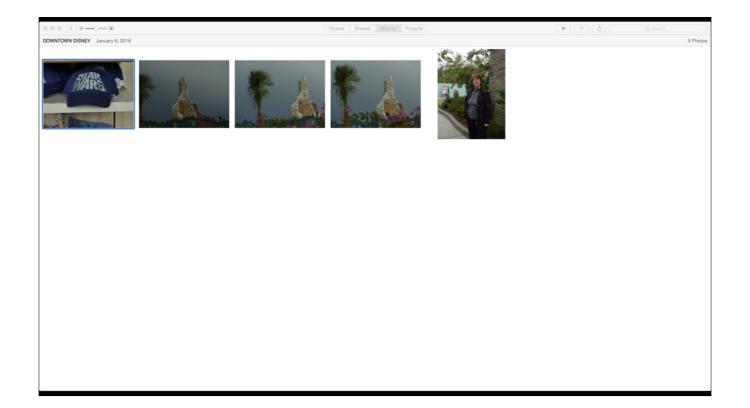
As you can see here, I've created folders for my various cameras and other digital photo sources. Note that I've preceded the primary name of each folder with a zero. This pulls the alphabetical listing of these folders to the top of the viewing screen so that they will be easy and quick to access when I need to do so.



Within each folder I can create subfolders whose name will match the names of albums I'll later choose to create in my PHOTOS app. And it gives me an even deeper level of organization for finding the original photos if I need to do so at a later time.



Once the app is opened, I can create albums just by clicking the (+) in the upper portion of the screen, then filling in the album name. Once that's done, then clicking on the named album, will open it and allow me to add to its contents by importing additional photos from my original photos folder.



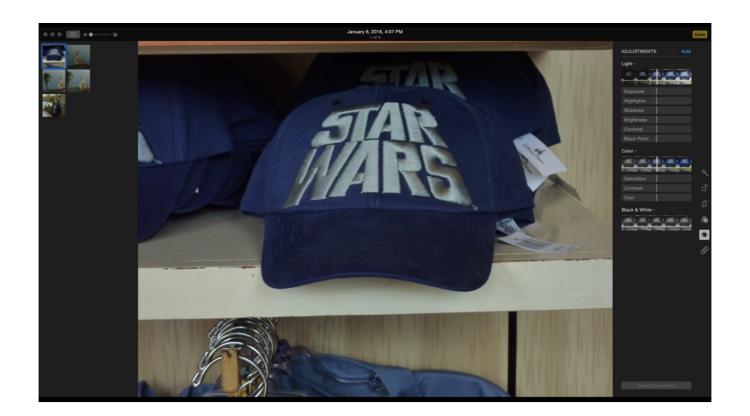
After my photos are imported, I can select any one that I may wish to view and/or edit.



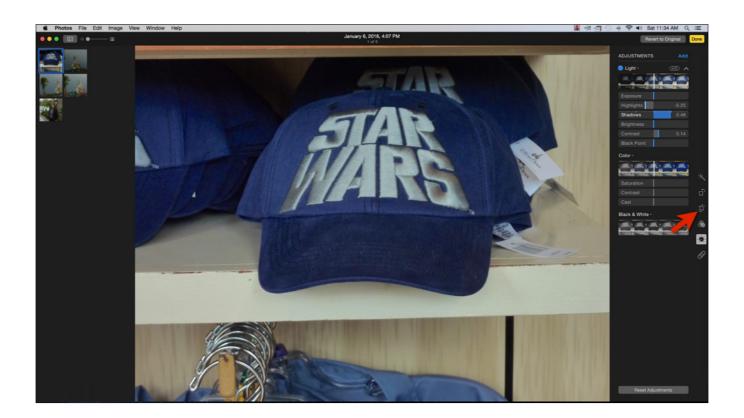
In the "view" screen, I can select the "Edit" button, and that will bring up...



... the EDIT screen. Here I can decide what type of editing I may want to do. First, I think I'll try to lighten the image, and possibly change the contrast a bit by selecting the "Adjust" icon indicated here by the red arrow.



Here I can move any of the sliders and view how a change will affect the look of the photo.



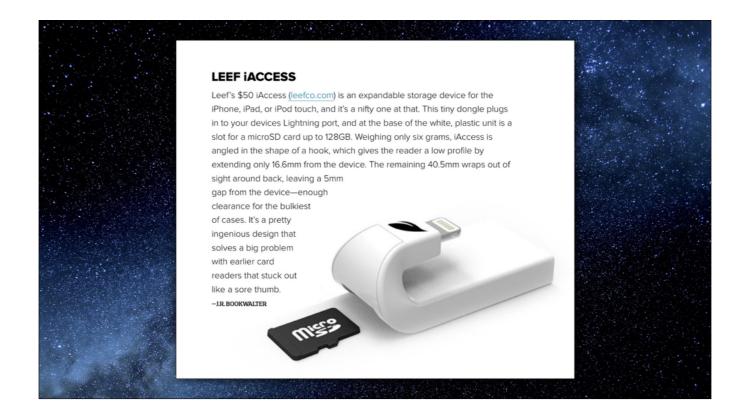
By moving the "Shadows" slider to the right, I lighten the shadows. Moving the "Highlights" slider to the left reduces glare on the highlights providing more detail. Moving the "Contrast" slider slightly to the right allows restoration of some of the contrast lost by the previous two adjustments. When I'm satisfied with the image adjustment I've made, I can move on to cropping my photo.



On this screen I can adjust the vertical alignment, then grab the sides or the corners of the photo to crop to the desired size and shape.



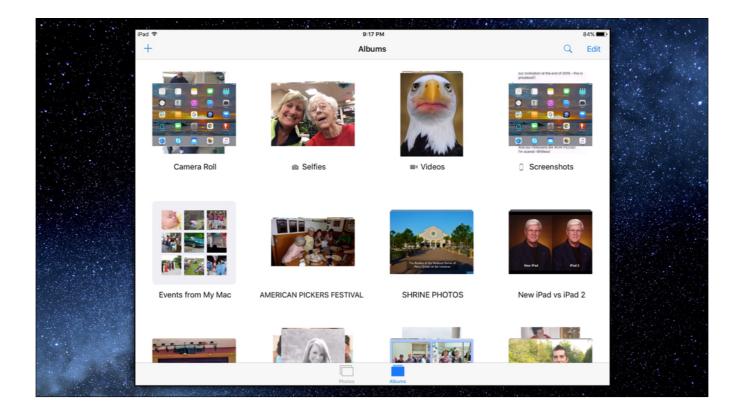
After I've completed the size adjustment, I simply click done, and the new version is now in my PHOTOS library.



As I mentioned earlier, if I wish to import photos from my camera card into an iOS device (iPad/iPhone/iPod Touch) I can use an SD card reader adapter for my specific model of device. The adapter show here is particularly nice in that it wraps around the iPhone or iPad rather than sticking out from the end. It's probably less apt to cause potential damage to the lightning connector (from the adapter accidentally being bumped sharply). Note that it uses a "micro" SD card, so an adapter to use the micro card will be required for most cameras.



Organizing my pics on my iOS device, like this iPad, are just as easily done as with my Mac. The same familiar icon appears on the screen. And as just mentioned, digital photographs can be imported directly from an SD card. Any photographs or movies taken with the iPad are automatically imported into PHOTOS, and will appear in the "CAMERA ROLL" album.

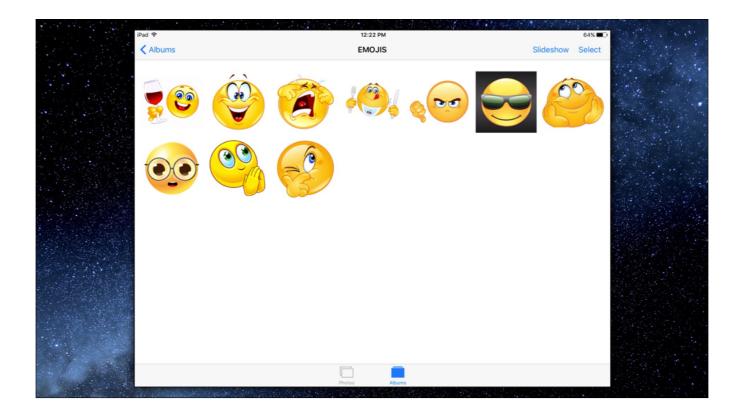


Likewise, the iOS device will automatically detect shots taken with the front-facing camera and group them in an album entitled "Selfies". Similarly videos and screen shots will be automatically grouped as well as "Events" imported from my Mac by syncing with the iTunes app on the Mac.

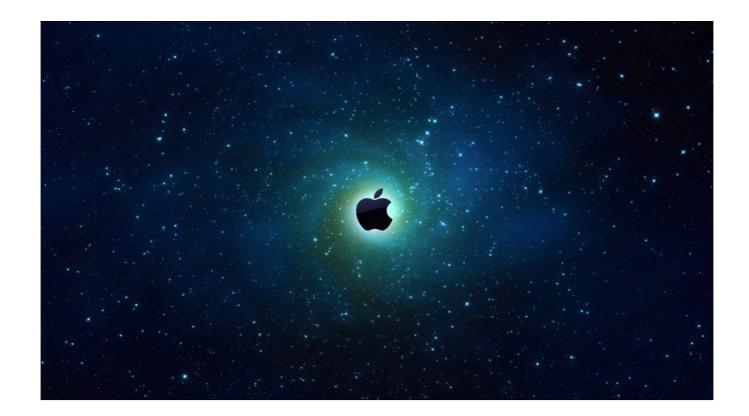
If I wish to add a new album, I simply touch the (+) symbol in the upper left corner of the screen.



And that will bring up a dialog box that will allow me to type in the name of my new album. I can then select any photos, movies or screen shots from any other album (including "Camera Roll"), and paste them into my newly created album. A copy will still remain in its original album.



At any time I can add or delete items from this or any other album without affecting the original item.



At our next meeting (Mar 23) we'll demo using this app on an iPad and show some tips and features.