

Organizing Photos on Apple Devices

Table of Contents

Introduction	2
Storing Photo and Video Files	3
Apple Photo Library	4
Conclusion	7
References	8

Introduction

Photos and Videos can be stored either as data files or put into a library like the Apple Photos or Google Photos. This document describes the Apple Photos library. You can set up your iPhone, iPad and Mac to use your iCloud account to keep all of your photos automatically available on all of your devices.

If you have a lot of photos (more than 5Gb) you may need to get a paid iCloud+ account for \$1/month or possibly \$3/month if you have more than 50Gb of photos.

The big advantage of having your photos in the Photos library is that it makes it very easy to search for your photos by title, description, location or the people and pets in the photos or other objects like flowers or dogs. This is done by using Artificial Intelligence to analyze the photos.

The Apple devices all offer storage optimization for your photos which can dramatically reduce the amount of storage needed for the Photos app on your device. It automatically keeps any photos you have taken or looked at recently and automatically pulls down the others from the Internet when you try to open them.

Storing Photo and Video Files

Photos and videos can also be stored as files on your Mac, iPhone or iPad. These can be stored in local file folders or in your iCloud files that are shared between your devices. This approach has each photo or video as a separate file. There are many different image (photo) and video formats that the files can use. Here are some common ones:

- Image:
 - **JPG / JPEG** - Joint Photographic Experts Group
 - **GIF** - Graphics Interchange Format - used for graphics
 - **PNG** - Portable Network Graphics - has transparency
 - **TIF / TIFF** - Tagged Image Format File
 - **BMP** - Bitmap File - Microsoft
 - **HEIF / HEIC** - High Efficiency Image Format (used in iPhones)

- Video:
 - **MP4** - Motion Pictures Expert Group
 - **MOV** - Apple Quicktime format
 - **WMV** - Windows Media Format
 - **AVI** - Audio Video Interleave - older format still in use
 - **FLV** - Flash Video File

There are programs (apps) which can convert a file into another file with a different format. Some of the image formats (JPG, PNG, GIF, HEIC) compress the image to make the file much smaller. For example a 12 megapixel image (roughly 4000 x 3000 resolution) would require 36Mb of storage if uncompressed (“raw”) but is often around 3Mb using the formats with image compression. There are videos and web pages that explain the details about this in the References section below.

Apple Photo Library

If you take photos on your iPhone or iPad they will automatically be stored in your Apple Photos library (used by the Photos app) and shared with your other Apple devices via your iCloud account.

If you enable storage optimization for your Photos library, only photos you have taken or looked at recently will be stored on your iPhone and all the others will be accessible if you are connected to the Internet (Wifi or cell data). For example, I have 21 Gb of iCloud storage for over 5,800 images and 80 videos. This uses up around 2Gb of storage on my iPhone.

Not only does the Photos library save storage space on your device, it also gives you the ability to easy search for any photo or or video in a wide variety of ways (date, title, location, caption / description, people or pets, or the contents of your photos, e.g photos with flowers or boats). This is very similar to the search features in the Google Photos app used on Android phones.

You can also edit the photos in the library to enhance them. The Photos app always retains the original version of the photo and you can restore this at any time if you like. When you edit a photo file you will modify the photo and can only restore the original file if you make a copy of the file before making any changes.

On the Mac version of Photos, you can either use the photo editor built into the app (program) or you can use any photo editing program on your Mac without converting the photo to a file first. The original version of the photo will be saved in either case. This can be handy if you have a photo editing program that provides features that are not in the editor built into the Photos app.

You can also add annotations (arrows, shapes, text, etc.) to your photos in the Photos app or copy the subject from your photo and paste it into other apps, like Mail or Messages. Notes or a document editor.

The Photos app supports Albums and keywords to make it easy to find specific photos. Each photo can be any number of albums and can have any number of keywords. For example, I use a “Lunch and Learn Cartoons” album for cartoons I have not used yet in the Lunch and Learn meetings and give them keywords like “tech, aging, dogs, passwords, etc.) to make them easier to find in that album. After I use the photo in a meeting, I simply remove it from the album.

You can also mark a photo or video as a favorite and it will appear in a special album called “Favorites”. The Photos app also supports “smart albums” which are saved searches that can be viewed by opening the smart album.

You can convert any of your photos or videos in the Photos library to files in your file system. This is called “exporting” a file from the library. You can also bring a photo into your library which is called “importing”.

On the iPhone and the iPad, you can select one or more photos or videos and click the Share button and then the “Save to Files” option to convert them to files (either in your iCloud or local folders). You can import photos and videos by using the “Save to Photos” option in the Files app. You can also do this in the Mail and Messages apps to put photos or videos you have received into your Photos library.

If you import photo files on your Mac into your Photos library, you don’t need to keep them since you can always export the original file (or an edited version) to a file from your Photos library using the Photos app.

Photos taken with your iPhone are stored in the Photos library in HEIC format. If you share an HEIC photo via email (Mail), it will automatically be converted to a JPG file which is more compatible with other phones and computers. See the “**What Are HEIC Files?**” video in the References section below.

You can also access your Photos library on any computer or other device using any web browser with the <https://www.icloud.com/> web page. It has an online version of the Photos app that will let you search and view any of your photos or videos. You can also export and import files with the browser interface. This is called “download” and “upload” for web photo apps like Apple or Google Photos.

Conclusion

Although you can store your photos and videos and files in folders in your file system on Apple devices, it is often much better to keep your photos and videos in the Apple Photos library. You can always convert them back into files at any time and the Photos app automatically does this if you share photos or videos via Mail.

The Photos app provides powerful searching and editing features but also supports using other Photo editing apps without having to export the photos as files.

When you use the iCloud for storing your Photos library, all your photos and videos will be available on any of your Apple devices. They will be kept synchronized automatically and you can enable storage optimization to dramatically reduce the local storage requirements without having to explicitly delete photos or videos from your device.

The references below explain the details. You can also view the Apple Addicts Videos document on my webpage <https://davetaenzer.com/docs>. The direct link to this is:

https://davetaenzer.com/docs/Apple_Addicts_Videos.pdf

This has sections on how to use the iCloud and the Photos app on various devices.

References

iCloud EXPLAINED! Here's what you need to know!

<https://www.youtube.com/watch?v=flAVZHpwDwg>

iPhone Photos App is AWESOME with these 10 Tips!

<https://www.youtube.com/watch?v=rqgkntWytRI>

Learn How To Edit Your Pictures In Mac Photos In 5 Minutes

<https://www.youtube.com/watch?v=HjwgT45qLLE>

20 Ways To Search Your Photos

<https://www.youtube.com/watch?v=l0Sh8MjSiig>

What Are HEIC Files?

<https://www.youtube.com/watch?v=eS4I4QJEOWU>

Image File Formats in Photography: The Ultimate Guide

<https://digital-photography-school.com/understanding-all-the-different-image-file-formats/>

The HEIC Image Format: Everything You Need to Know

<https://www.batchphoto.com/blog/the-heic-image-format-everything-you-need-to-know/>

14 Common Video File Formats & Extensions (+ When To Use Them)

<https://shotkit.com/video-file-formats-extensions/>

Understanding Video File Formats, Codecs and Containers

<https://www.techsmith.com/blog/video-file-formats/>