Note: This discussion is based on MacOS, 10.14.6 (Mojave). Some illustrations may differ when using other versions of macOS or OS X. Most illustrations are from screenshots on my iMac.

In this Mac Basics presentation, we'll discuss what ZIP files are and how to use them on your Mac.

What is a ZIP File?

Wikipedia [https://en.wikipedia.org/wiki/Zip (file format)] explains:

"ZIP is an archive file format that supports lossless data compression. A ZIP file may contain one or more files or directories that may have been compressed. The ZIP file format permits a number of compression algorithms. ... This format was originally created in 1989 and released to the public domain on February 14, 1989 by Phil Katz. ... The ZIP format was then quickly supported by many software utilities. ... Apple has included built-in ZIP support in Mac OS X 10.3 (... now Archive utility) and later. ... ZIP files generally use the file extensions .zip or .ZIP."

A recent post on lifewire.com adds some further explanation:

"A ZIP file, like other archive file formats, is simply a collection of one or more files and/or folders but is compressed into a single file for easy transportation and compression.

"The most common use for ZIP files is for software downloads. Zipping a software program saves storage space on the server, decreases the time it takes for you to download it to your computer, and keeps the hundreds or thousands of files nicely organized in the single ZIP file.

"Another example can be seen when downloading or sharing dozens of photos. Instead of sending each image individually over email or saving each image one by one from a website, the sender can put the files in a ZIP archive so that only one file needs to be transferred."

Simply put, ZIP files are just containers that hold compressed versions of the actual file(s) that you're after.

Creating a ZIP File

Compression. You can compress a single file, group of files, or even folders into a ZIP archive using a simple command in the Finder—a process known as "zipping" the files. So, it's no surprise that the icon for a ZIP file in most operating systems includes a zipper. Here's the one used by macOS:



ZIP Icon

All you need to do is use the **Context pop-up menu** in the Finder. Bring it up by **Right-Clicking** (or Control-Clicking) on a selected file or group of files. One of the options in the Contextual menu is **Compress**.

To ZIP a single file, select it in the Finder, and look for the option **Compress** along with the name of the file:

Open Open With
Move to Trash
😌 Send with Transfer
🥶 Move to Dropbox
Get Info
Rename
Compress "Quick Look, 06-23-2019.docx"
Duplicate Exactly
Make Alias
Quick Look "Quick Look, 06-23-2019.docx"
Share
Quick Actions

Context Pop-up Menu (Partial) – Single File

A new file with the name of the selected file will be created with .zip appended to it (in the example above, QuickLook, 06-23-2019.docx.zip).

If you're compressing a group of files or folders, filenames are not added, but the *number* of items will be appended (5 files in this example):

New Folder with Selection (5 Items)
Open
Open With
Move to Trash
😌 Send with Transfer
🔨 Move to Dropbox
Get Info
Rename 5 Items
Compress 5 Items
Duplicate Exactly
Make Alias

Context Pop-up Menu (Partial) – Multiple Files

If one file (filename) is selected, the compressed one will be named *filename*.zip. If several files or folders are selected, a compressed file named Archive.zip will be created.

- It will be created in the same location as the selected files.
- If the files are in different locations, the archive file will be located at the highest level in the Finder that's common to all the files.

How Much Compression? The amount of file compression in a ZIP archive depends on the nature/content of the files being compressed. Some examples:

- When I compressed a 7.9 MB Rich Text File (.rtf), the ZIP archive size was 1 MB (a 6.9 MB, 87%, reduction).
- Compressing a 1.1 MB Microsoft Word file (.docx) containing imbedded images resulted in a 1 MB ZIP file (a mere 0.1 MB, 9%, reduction).
- Finally, compressing the 5 files in the previous example (5.8 MB total containing 3 Microsoft Word files @ 1.1 MB each, a 1.9 MB PDF file, and a 0.6 MB PDF file), the ZIP archive was 4.8 MB (a 1 MB, 17% reduction).

As you can see, the amount of compression can vary greatly. Images, such as a jpeg, are already highly compressed, so zipping one saves virtually no space. However, compressing word processing documents can potentially reduce the file size by quite a bit.

Opening ZIP Files

In macOS, like most operating systems, ZIP files are handled internally, without the need for any extra software. Simply double-click on a ZIP file to Open (decompress) it, and it shows you the folders and files contained inside. A new Finder folder will be displayed containing the ZIP archive along with the decompressed file(s) that were in it.

In the example below, a ZIP archive was created by selecting 5 files from one folder, labeled 06-June (Quick Look), and 2 files from another folder, labeled 07-July (Archiving Files With PDF). If the selected files are contained in any folders, representations of those folders are displayed as well:

🔻 🛅 Archive
🔻 🛅 06-June (Quick Look)
Quick Look, 06-23-2019 [Presentation].pdf
🛯 Quick Look, 06-23-2019 1.docx
Quick Look, 06-23-2019 2.docx
Quick Look, 06-23-2019 3.docx
Quick Look, 06-23-2019.pdf
🔻 🚞 07-July (Archiving Files With PDF)
Archiving Files With PDF, 07-21-2019.docx
Archiving Files With PDF, 07-21-2019.pdf

ZIP Archive Opened

Archive Utility

Buried deeply in the macOS hierarchy is the **Archive Utility** to create and open ZIP files. You can find it here (assuming that your drive is labeled Macintosh HD):

Macintosh HD/System/Library/CoreServices/Applications/Archive Utility.app

Of course, the simplest way to open the Archive Utility is to use **Spotlight** (keyboard shortcut: Command-Space, \Re + spacebar).

Archive Utility a very basic utility. Its File menu has only two options:

Create Archive and **Expand Archive**. Select **Create Archive** from its File menu, select some files from the pop-up window, and then press the **Archive** button to create a ZIP archive. Similarly, select **Expand Archive** and then choose a ZIP file to expand.

The real power of the Archive Utility lies in the options in its **Preferences**:

00	Archive Utility Preferences
Save expanded files: After expanding:	into same directory as archive 🗘
	Reveal expanded item(s) in Finder
	Keep expanding if possible
Save archive:	into same directory as files being archived ᅌ
Use archive format:	compressed archive ᅌ
After archiving:	leave files alone
	Reveal archive in Finder

Archive Utility Preferences

Here there are more options than the simple double-click to Open (decompress) or Right/Control-click to ZIP (compress) a file.

For expanding a ZIP archive:

- You can set a location where expanded files will be saved (into the same location/directory as the ZIP archive or into another location that you choose).
- You have four options to choose from to set what happens to the ZIP archive after it's expanded (leave archive alone, move archive to Trash, delete Archive, or move the archive to another location).
- In addition, there are checkboxes so you can choose: (1) whether or not to Reveal expanded items(s) in Finder and (2) if there are ZIP files inside a ZIP file whether the expansion continues till everything is unzipped.

When creating an archive:

- You can set a location (into the same location/directory where the archive is located or into another location that you choose).
- You can choose from three archive formats: (1) a special compressed format that should be used only if you're optionally sending it to another Mac, (2) a regular/uncompressed archive*, or (3) a zip archive which can be universally open by all sorts of different operating systems and devices (the option that you get by default in the Finder).

* This option might be useful if you're dealing with a large number of files, not much compression is expected, and it will take some time to compress and decompress it. Think of it as a way to gather files to reduce clutter.

- You have four options to determine what happens with the original files after they are zipped/archived (leave them untouched/alone, move files to Trash, delete the files, or move the files to another location).
- Finally, there is a checkbox so you can choose whether or not to show/reveal the archive in the Finder.

Summary

Zipping files is handy to reduce their size for sending to others. On the other hand, you can ZIP files to compress them into a single file in order to simply save space on your hard drive or to organize files as you wish. For example, at the end of a project you might want to take all the files that you worked on and compress them into a single ZIP file/archive in order to take up less space on your hard drive. One archived file also creates less clutter. After all, the project is over, so why not archive it to use a little less hard drive space and reduce clutter?

The macOS offers an easy way to ZIP/compress files and folders through selecting the Compress option in the context pop-up menu (by Right/Control-clicking on selected items). Similarly, open/un-ZIP/decompress a ZIP archive by double-clicking on it.

Finally, the macOS includes an Archive Utility if you want more control over how ZIP files are expanded and created.

Next Presentation

For the next presentation, we'll take a look another macOS feature.

Have a favorite Mac Tip or utility? Please feel free to pass it along, and I'll see if I can work it into a future presentation.

If you have any suggestions for presentation topics, including macOS utilities, please contact me at slip4668@gmail.com.

-Steve Parker

Credits:

- Referenced in the presentation
- <u>https://macmost.com/how-to-zip-and-unzip-files-on-your-mac.html</u>