

Metadata for Digital Files and Images

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What is Metadata?

What if you could store information about a digital file including a description, the author, keywords, etc., and associate it with the file so that it is always accessible? What if you could easily search on your computer for all photos with a certain person in them? Using metadata for digital files and images will do just that. Leveraging the power of metadata is a valuable means of managing and organizing digital files.

Basically metadata is “data about data” and is a way of classifying and organizing files including digital images. A better definition of metadata might be “constructed information,” meaning a classification of various data points about a file. It is available on many different types of files including photo files such as: JPG, TIFF, and PNG.

The main advantage of metadata is its portability, meaning that when the file is emailed to another person or posted online, the metadata stays with the file. Sort of like having a virtual sticky note that travels with a photo and tells you more about who is in the photo, where it was taken, etc.

An Example of Metadata: A Digital Photo

If I have a photograph of a family taken at a family reunion in 2009 and the image was taken using a digital camera, here are some of the data points I might see “embedded” as metadata:

- **Date:** The date the photo was taken
- **Camera:** The make and model of the camera used
- **Size:** The measurements of the photo
- **Resolution:** The DPI or “dots per inch”

In addition to embedded metadata that is included from the camera, for some files, you can add your own data including:

- **Title:** The name of the photo
- **Location:** General location where the photo was taken
- **Subject:** Who or what is in the photo
- **Copyright:** Who took or owns the photo and contact information
- **Keywords:** about the photo so it can be searchable on a computer or internet
- **Geo-tagging:** Label where photo was taken with exact coordinates

How Metadata Can Assist the Genealogist

There is great value in using metadata and actually adding metadata to your photo and document files as a genealogist. It comes in very handy if you collaborate with other researchers and family members or if you want to provide these files to a research client...remember that the data follows the file!

- **Add tags to photo, documents and files.** Tagging or labeling is a way of organizing and categorizing files. Consider tags such as surnames, location names, time periods, record sets such as “Henneberg; 1920 Census; Bronx.” Once added you can use the search function to locate similarly tagged items.
- **Add a copyright statement to files.** One way to trace the use of your original work is to add a brief copyright statement in the Comments section of the file’s metadata. Most users are not aware of metadata and this can offer a way to trace the origination of a photo or document you locate on the Internet.
- **Add a source citation to a file.** If a file represents a copy of a record, consider placing the source citation in the Comments section of the file’s metadata. Then you can always determine how the document was located and when.
- **Geotag a location.** Note where you took a photograph, maybe of a grave or ancestors’ homes. There are many programs that can help you do this and then easily upload the photos to Google Earth placing them in the proper location.

Generated Metadata

When you use a camera and even, sometimes, a scanner, metadata is automatically generated right in the file when the digital image is created. If basic data is enough, you don’t have to add anything more. But being genealogists, we want a lot more information in our photos than just the basic date, time, size, creation device, etc. of the photo. In addition, some cell phones and newer cameras will also include more basic information including the latitude and longitude in the file.

Do I Need a Metadata Editor or Special Software?

If you have a file management program like Windows Explorer, you can usually access metadata by **right-clicking over a file** and selecting **Properties**. If you normally use photo management programs take advantage of their built-in metadata features.

There are stand-alone programs that can be used, see **Wikipedia: Comparison of Metadata Editors** in the **Resource List** for more information.

Adding and Editing Metadata

Using the Windows 10 operating system here is how to display and add/edit metadata.

- **Displaying Metadata.** It is easy to display the underlying basic metadata for any file:
 - Right-click over a file and select **Properties**.
 - Click the **Details** tab. Most of the basic types of metadata are displayed.
- **Adding/Editing Metadata.** Not all metadata fields can be edited but many fields such as **Comments**, **Subject** and **Tags** which are helpful to the genealogist can be edited.
 - Click in a field such as **Comments** and start typing.
 - When finished click **OK** and the new metadata will be stored with the file.

Metadata Tips and Tricks

Accessing and adding metadata to digital photo files and other file types is not difficult if you know how!

- **Access shortcut keys.** Use the **Cut** (CTRL + X) and **Paste** (CTRL + V) functions on your computer keyboard to populate fields such as Comments.
- **Use Tags.** Depending on the metadata editor used, the Tag fields can store large amounts of information. Each tag is followed by a semi-colon “;” and most editors will automatically place the semi-colon between inserted tags.
- **Describe the file.** Use the Description field which holds large amounts of information. Describe the “who, what, when . . .” of a photo.
- **Photo Rating field:** You can set up your own personal rating system for images or files using the Photo Rating field. Example: if a scanned document is clear and is an original which supports your genealogy research, assign it five stars. If an image of a record is not clear and does not contain strong evidence, give it only three stars. Over time, you can then sort your list by those ratings.

Resources

- **ExifInfo.org**
<https://exifinfo.org/>
- **ExifTool**
<https://exiftool.org/>
- **GeoSetter**
<http://www.geosetter.de/en/>
- **Guide to Photo Metadata Fields**
<http://www.photometadata.org/meta-resources-field-guide-to-metadata>
- **IrfranView**
<http://www.irfranview.com>
- **Jeffrey's Image Metadata Viewer**
<http://exif.regex.info/exif.cgi>
- **Metadata History**
<https://www.photometadata.org/META-Resources-Metadata-History>
- **Photo Metadata Project**
<http://www.photometadata.org>
- **Qroma.net**
<https://qroma.net/>
- **SnipTag (iOs)**
<https://sniptagapp.com/>
- **The Top 12 Myths About Embedded Photo Metadata**
<http://www.controlledvocabulary.com/blog/top-metadata-myths.html>
- **ThingLink**
<https://thinglink.com>
- **What is EXIF Data?**
<http://www.digicamhelp.com/glossary/exif-data/>
- **Wikipedia: Comparison of Metadata Editors**
http://en.wikipedia.org/wiki/Comparison_of_metadata_editors