

## Part 2

1. Using exiftool vs bvi: Can you use exiftool on an mp3 file? Can these tools be used on other files, such as Word documents? PDF files? Does this seem useful?

Exiftool cannot be used on mp3 files however bvi can. The tools can be used on other types of documents as well, including word documents. This could be useful when searching for plagiarism with a student's paper and also in the business world to ensure workers are creating their own work.

2. Why would someone use EXIF?

EXIF could be used for a variety of reasons. The reasons vary between simple information gathering and adding privacy to files. Using EXIF allows for the user to see and edit some of the metadata within a file. This can be useful in a variety of ways.

Allowing the user to see where data comes can help the user identify whether or not the person using the file created the same file. This could help with plagiarism and copyright lawsuits. This also may come in handy with criminal files saved on a computer to better identify when and where a file was created.

Another use of EXIF is its ability to "scrub" data. Scrubbing data is when metadata from a file is deleted or hidden from other users. This comes in handy with social media sites. Most social media sites scrub metadata pertaining to a person's location

for user's privacy. However, a down side of this can also be derived from an example above. Criminals could also use EXIF to scrub their own files so they will be harder to track.

3. What can be done with EXIF tagged images that is much more difficult or impossible without it?

EXIF allows for images to share many variables. Some of these variables include the location, time, date, system used to create the file, file origination, etc. Also, EXIF shares the specific data for the file to appear in a way users can see it. This also implies that if the user can see all these different types o data, the user may manipulate it as well.

4. Does EXIF raise any privacy concerns? If so what can you do about it?

EXIF most certainly does raise privacy concerns. If EXIF is not scrubbed prior to sharing a file online, anyone with the awareness of EXIF's abilities could track exactly where that file came from, so long as the address is saved in the metadata.

For protection against this privacy issue, the user can scrub their own location data or more prior to uploading a file to the internet. Although this may not guarantee protection, it is a step in the right direction.

5. How might iTunes can keep track of how many times you've shared an mp3 file?

iTunes may store the amount of times their files are shared inside of the metadata. Anytime the file is copied, a “ticker” may be notified in the metadata and it may have a predetermined amount of share allowed before it discontinues the share ability.

6. Amazon lets you store mp3 files. You are not charged for files you have purchased from them. How might they know this information?

Amazon likely stores their name inside the metadata in order for this deal to work. Amazon probably searches the metadata in a specific location to ensure the product is one of theirs.