

ABOUT PHOTOMETADATA

Overview

When digital cameras capture photos, EXIF metadata are written into the image file. During the following workflow, additional metadata are written by the photographer, picture desk editor, picture librarians and also automatically by application and system software.

This image annotation is a necessary activity for cataloguing photos. It is used to enter for each picture some classification information in a predetermined coding. These informations will be used later on to find the photo with a search by multiple criteria. This activity is useful for professional photographer working under contract, as for the amateur photographer.

Based organizations and practices, this activity can take place at any time in the workflow of image processing.

However it seems that the best time is as close as shooting and by the photographer himself. Indeed, it is then that the contextual elements (events, characters, location, ...) are best known and mastered.

On the other hand the modern communications make it possible to provide photographs and therefore the classification information at the other end of the world almost instantly after the shot.

Today the itinerant photographer has a laptop computer on which it can save photos taken during the day, update metadatas with its images management software and transfer them to a remote site for further processing.

With the arrival of iCloud, these operations can be simplified, shortened, become cheaper while allowing a more lightweight photographer's bag.

The most used predefined coding system is named IPTC Core.

IPTC -International Press and Telecommunications Council- is the creator of this standard or controlled vocabulary.

A complete presentation of IPTC codes is given at this url : http://www.iptc.org/site/Photo_Metadata/.

Objet

PhotoMetaData is a very useful app for any professional or amateur photographer.

It is used to enter the metadatas after the shooting session.

The values of these metadatas are either those provided by the app and consistent with the IPTC Core 1.0 either those defined by the photographer himself, his agency or his client.

Once filled these metadatas are stored locally on the Mac and if asked in a cloud storage such as iCloud. In this case they can be treated almost immediately by a remote authorized organization.

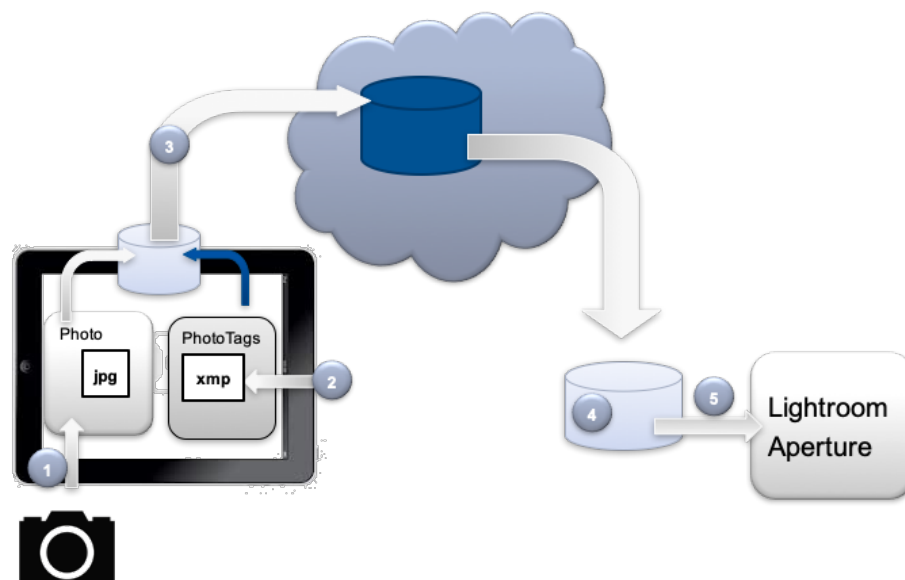
The metadas are stored in a xmp file. Then every images manager software such as Lightroom is able to import them at the same time that the images themselves.

*Updating
photo
metadatas*

iCloud

*Easier
More suitable
Cheap*

Process



After shooting, images downloading and metadatas recording on Mac:

1. Import images from camera to Mac with WiFi connection, ...t,
2. Filling of metadatas for each image on the Mac with this app,
3. The XMP files are automatically store locally in Mac and if asked remotely after a delay on a cloud storage,

Importing in the image management software on Mac OSX, PC Windows or Linux:

4. Selecting the right location according to the stockage option chosen,
5. Import in a Lightroom project.

Interface

The interface is organized around four screens selectable by button on a bottom bar of the Mac.

- "Library" screen,
- "About" screen,
- "Preferences" screen,
- "Tables" screen.

Library Screen

At the launch time the app presents the collections of images in library on Mac : saved images, events or albums depending of your choice in preferences screen.

Collection table

For each collection this table shows its name, its poster image, its number of images on red background and its number of xmp files already created on green background. When we select an album the app show a scrolled roll of images presents in the selected album and the action buttons in a modal window or a bottom bar.

Bottom bar or modal view

The action buttons are available on a bottom bar or on a modal view. The user can choose in the « Preference » screen.

The buttons are used to select the following action:



Show the previous picture in the roll. Before that and if the Headline field is not empty, the XMP file is saved for the current photo.



Show/hide the EXIF metadatas view. The values of field are those of the selected picture,



Show/hide the album table view,



Show/hide the roll of images of the selected album,



Delete the metadata files of all pictures of the selected album,



Delete the metadata file of the selected picture of the selected album,



Reset the controlled vocabulary text fields of the selected IPTC view,



Show/hide the IPTC metadatas view. The values of field are those of the selected picture,



Show the next picture in the roll. Before that and if the Headline field is not empty, the XMP file is saved for the current photo

Roll view

The roll view shows the pictures presents in the selected album. A red frame rounds the selected picture.

When metadata file already exist for the selected picture the app put a yellow light on the photo in the roll.

EXIF view

This view shows the most important technical information written by the camera into the image. For example :

- Camera model,
- Lens model,
- Focal length,
- ISO speed,
- Exposure bias,
- Aperture value,
- Exposure time,
- Metering mode,
- Flash fire,
- Balance mode,
- Exposure program,

- Exposure mode.

IPTC view

The IPTC Core Content, IPTC Core Image and IPTC Status views are on the same scrolled view.

IPTC Core Content :

- Headline
- Caption/Description
- Keywords
- Subject Code

IPTC Core Image

- Intellectual genre
- IPTC Scene
- Geographical Fields
 - Sublocation
 - City
 - State/Province
 - Country
 - ISO Country Code

IPTC Core Status :

- Title
- Job Identifier
- Instructions
- Credit Line
- Source
- Copyright Notice
- Rights Usage Terms

To facilitate entry, the screen shows the value and definition for codes such as Intellectual genre, Scene.

Fields "State / Province", "Country" and "Country code" are filled in automatically if Internet connection is available.

It is possible to use your own values by providing the app code files containing these values. The process and the format of these files are described at end of this document.

The app provides 3 files with values, code and definition for Intellectual Genre, Subject Codes and Scene fields.

About screen

The « About » screen displays this document.

Preferences screen

In this screen you can fill the IPTC Contact view with the contact information fields. You can also choose the storage option:

- Local: only locally in the Mac

- iCloud: locally and in the iCloud Drive storage.

You can also choose the way to show the action buttons: bottom bar or modal view.

Tables screen

The purpose of this screen is to show:

- the IPTC codes and their definition,
- the value, code number and definition of the 3 fields: Intellectual Genre, Subject Code and Scene,
- the ISO country codes.

Prepare to import in the images management software

Process with a local storage

1. Create a folder "PhotoMetaData" in your "Pictures" folder,
2. Open a Finder window, select your Mac, click on App tab, in the bottom of the screen select PhotoMetaData and export the folder "Tags" to folder "PhotoMetaData",
3. In Lightroom select each folder in "PhotoMetaData /Tags" folder when import process.

Process with iCloud Drive

In Lightroom select each folder in "iCloud Drive/PhotoMetaData/Tags" folder when import process.

Add your own value, code and definition files

The app provides 3 files with values, code and definition of Intellectual Genre, Subject Codes and Scene fields.

You can provide your own files by copy them in the iTunes Files sharing folder of this app.

These files can contains for example:

- The translation of current information in an another language,
- Some new value adapted to your work, subject, contract,...
- An extract of the initial files,

You have to be aware of 2 things :

- File title,
- File format,
- the agreement to the Non-Exclusive License Agreement for International Press Telecommunications Council Specifications and Related Documentation. You can read this License Agreement here : http://www.iptc.org/std/photometadata/specification/IPTC-PhotoMetadata-201007_1.pdf.

File title

The title of file is like this :

<code name>_<language code>.txt

- code name=
 - IntellectualGenre
 - Scene
 - SubjectCode
- Language code =
 - en,
 - fr,

File format

The file format is « Unicode 16 bits tab delimited text »

These files can be created, updated with any office application such as Microsoft Word or Excel.

The format of each line is :

<Code name>tab<Code number>tab<Code definition>

For SubjectCode file, you have to put a blank line between each boarder concept.