



What are Metadata Standards good for?

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Your metadata experience

IPTC IPTC Extension PLUS Description Advanced

multiple values may be separated by a comma or semicolon

Sublocation: Entrance Hall of the Louvre
City: Paris
State/Province: Ile de France
Country: France
ISO Country Code: FR

ⓘ The location above could either be the location shown in the image or the location from which the photo was taken. To make a clear distinction use the two Location properties on the IPTC Ext panel

IPTC Content

Headline: Richelieu building of the Louvre

Description: Facade of the Richelieu building of the Louvre through the glass pyramid of the entrance hall

Keywords: Building; Baroque; Louvre; Paris connection

ⓘ Semicolons or commas can be used to separate multiple values

- “Metadata are fields that could be / should be / must be filled in – depending on a company policy”
- “After closing the panel the values – by some magic – can be read by other software in other companies and are displayed to other persons”
- “People can even search by using metadata values”



Behind the metadata curtain

State/Province:	Ile de France
Country:	France
ISO Country Code:	FR
<small>ⓘ The location above could either be the location shown in the image or the location from which the photo was taken. To make a clear distinction use the two Location properties on the IPTC Ext panel</small>	
IPTC Content	
Headline:	Richelieu building of the Louvre



The software translates the description you have typed in into a technical representation – like this one in XMP

```
<photoshop:DateCreated>2010-03-07</photoshop:DateCreated>
<photoshop:City>Paris</photoshop:City>
<photoshop:State>Ile de France</photoshop:State>
<photoshop:Country>France</photoshop:Country>
<photoshop:Headline>Richelieu building of the Louvre</photoshop:Headline>
```

The software recognizes fields by their identifiers.

The identifiers are defined by a metadata standard to provide interoperability



That makes a metadata **standard**

Description:	The "Magere Brug", a tiny and historical bridge across one of the small channels, the "grachten", in Amsterdam city.
Keywords:	bridge; city; channel

Location:	Magere Brug
City:	Amsterdam
State/Province:	
Country/Territory:	The Netherlands
ISO Country Code:	NL

Each metadata field has

- a globally unique **identifier**
- a specific meaning and purpose – its **semantics**
- a **data format** (text, date, number ...)
- and should have a **recommended label**.

A set of specified fields is called a **metadata schema** – maintained by a standardisation body.

Software makers which are implementing a metadata standard **MUST** adhere to these rules.



Metadata Standard Schemas /1

- **IPTC “Fields”**: have a focus on describing the content and providing administrative information, initially for the news industry, but now used widely.
 - IPTC IIM (Information Interchange Format) of 1994 and later ... was merged into ...
 - IPTC Core Schema (for XMP - and IIM): 2005
 - IPTC Extension Schema (for XMP): 2008
- **Exif (TIFF)**: has a focus on technical metadata about taking the picture and its digital representation.
Maintainers: CIPA & JEITA, latest version 2.21 (2003)
- **PLUS**: has a focus on rights metadata – created 2007
Builds on XMP and making use of controlled vocabularies



Metadata Standard Schemas /2

- **„Photoshop fields“**: Many fields in Photoshop are from IPTC standards, beyond that are a couple of specific fields in Adobe schemas for XMP – e.g. „Rating“.
- **Dublin Core**: has a focus on describing the content and administrative information. Very generic use from book libraries to multimedia content – created in the 1990s.
- **PRISM/DIM (Digital Image Management)**: has focus on pictures for magazines – created ~ 2004



Web References

- IPTC Photo Metadata Standards: www.iptc.org/photometadata
- Exif / CIPA: <http://www.cipa.jp/english/hyoujunka/kikaku.html>
- PLUS: www.useplus.org
- Dublin Core: www.dublincore.org
- PRISM/DIM: www.prismstandard.org
- W3C Media Annotations WG: www.w3.org/2008/WebVideo/Annotations/



Metadata evolution

Standards have to address two completely controversial requirements:

- to provide persistence over time
- to incorporate additional requirements from photo businesses

The “art of making a standard” is to find the right way between these two poles – and not to stick to only one of them.



...

... thank you for listening to us ...



... and visit us at www.iptc.org →Photo Metadata section