

Competition Image File Data

Definition of Standard - Version 1.0

Principles of Use

The Competition Image File Data (CIFD) standard defines a superset of all properties likely to be either available from or with competition image files, and then likely to be required when using competition image files.

The properties are independent of any method of acquiring the data, and equally independent of any use of the data.

Any source of data is unlikely to provide the complete set of CIFD properties, and any use of data is unlikely to require the complete set of CIFD properties. What is essential in any practical implementation using CIFD is that the subset of properties required by the ultimate use is reliably contained within the subset of properties available from the source.

Sources of Data

Manual Entry: The sources of image files are the photographer members of clubs. Within a club, photographers may be either encouraged or required to submit image files with a specific naming format. As a minimum, this should provide the properties of SourceFile, Title and Photographer (refer to the Properties section below). Other properties may be acquired as constants for a set of images eg, Event, Category. Yet other properties may be acquired on a per-image basis. A system for managing source data may hold a 'recipe', meaning a description of what is available from the image filename, what must be requested from the system user as constants, and what must be requested from the system user per-image. All the data acquired could then be stored in a CIFD file.

On-Line Entry: Images may be submitted via on-line systems. A typical advantage is that the photographer entrant does not have to use any defined format of filename because any required per-image data is collected alongside the uploading process. When the images and the per-image data are recovered, constant properties such as Event and Category can be added automatically.

Uses of Data

The uses of data are likely to be for a competition display and scoring system. There are a variety of such systems. Each has its own requirements for the format of metadata, particularly the image filename and sometimes the use of folders for groups of image files.

When Clubs are guests at inter-Club events, or generally need to submit images for use by another organisation, a frequent task is renaming of the image file entries. When this has to be done manually, it is both time-consuming and, as a manual process, error-prone.

Provided that the available CIFD data contains all the properties required to construct the image filenames and any folders for the other organisation, then the construction process can be automated. This will save time and maintain accuracy.

It may be that a club's design for data collection does not hold a property value which is later found to be required for a particular use by another organisation. There will need to be a method of adding either or both of constant and per-image property values to those which exist. There should also be a method of editing available property values.

The Properties

The format of each property is general, meaning that storage is not limited to any particular data type. Any system reading the data must manage ambiguity, such as a number being read as a string.

Where a property is used to form part of a file name, then the using system is responsible for ensuring that any characters invalid for a file name are removed. A source system may optionally remove such characters before storing a property value.

The following properties table is expressed as if the data is stored in a spreadsheet, with the properties in columns and the image data in rows. The standard does not assign any significance to the order of the rows.

Column	Property	Use
1(A)	SourceFile	Image filename of jpg type Other file types eg, jpeg, tif, tiff, gif, png, psd, are not excluded by the standard but a system reading the data may impose its own restrictions. Required and unique within the whole table. If relevant, Source File may include a path.
2(B)	Event	The name of the event
3(C)	Category	The category within the event eg, Open, Nature
4(D)	Title	The title of the image entry
5(E)	Entrant	The name of the entrant (alphanumeric)
6(F)	EntrantType	The type of entrant <ul style="list-style-type: none"> • 'P'=photographer • 'C'=club • otherwise unspecified
7(G)	Email	The email of the entrant
8(H)	Club	The club of the photographer. <ul style="list-style-type: none"> • Where the Entrant Type is 'C', an empty Club property may be filled from the Entrant property. • Where the entrant is eg, a federation, Club should be an available data item.
9(I)	Photographer	The name of the photographer as creator of the image. <ul style="list-style-type: none"> • Where the Entrant Type is 'P', an empty Photographer property may be filled from the Entrant property. • Otherwise, Photographer is expected to be an available data item.
10(J)	Distinctions	Distinctions of the Photographer Where feasible the Photographer and Distinctions columns may be split from a single data item of the photographer's name suffixed by distinctions.
11(K)	ID	A database key where source images may be archived across many events.

12(L)	DateTime	A timestamp for the image, such as when it was uploaded as an entry. No format of the date/time is required
13(M)	Width	The width of the image in pixels
14(N)	Height	The height of the image in pixels
15(O)	Seq	A sequence number, meaning the order of showing the entries from one Entrant in a Category of an Event
16(P)	Ent	A value representing the entrant, which when sorted means the order of showing the entrants within a sequence cycle in a Category of an Event

Required Properties

As the purpose of CIFD is to hold metadata for image files, the SourceFile property is required, and is the primary key of the data table. It must map 1:1 to an available image file. A row with a blank SourceFile is taken as the end of data.

In practice, the Title and Photographer properties will always be used.

All other properties are, in principle, optional. A property will only be required if it is needed as part of the output when image files are exported to a particular competitions system. (Refer to Principles of Use.)

Method of Storage

CIFD data is middleware, lying between a source of the data and a use of the data. As such, the method of storage may be anything agreed between the source and the subsequent use.

As examples which are alternatives to the spreadsheet format shown in the Properties table, the data could be stored:

- In a relational database table such as MySQL or MS-Access.
- In an XML text file using the Properties' names as schema items.

XML Example:

```
<image>
  <SourceFile>mypic.jpg </SourceFile>
  <Title>My Picture </Title>
  <Photographer>Me</Photographer>
...
</image>
<image>
...
</image>      [etc]
```