

Exiv2 - Feature #1040

MWG-KW schema

12 Mar 2015 20:40 - Alan Pater

Status:	Closed	Start date:	12 Mar 2015
Priority:	Normal	Due date:	
Assignee:	Alan Pater	% Done:	100%
Category:	metadata	Estimated time:	0.00 hour
Target version:	0.25		
Description			
This patch adds support for Metadata Working Group (Hierarchical) Keywords. I previously added support for Lightroom Hierarchical Tags, a custom XMP schema in wide use by Adobe. MWG-KW is the schema developed and published in MWG guidelines.			
Exiftool has included support for this schema for some time. With this patch, exiv2 can create and modify these hierarchical keywords as well.			
I have tested against exiftool and not seen any errors.			
Related issues:			
Related to Exiv2 - Bug #784: Writing Xmp.Ir.hierarchicalSubject writes wrong ...		Closed	02 Aug 2011

Associated revisions

Revision 3634 - 24 Mar 2015 22:09 - Robin Mills

#1040. Thank You Alan for reporting this and providing the patch. Thank You Thomas for validating this change.

Revision 3642 - 25 Mar 2015 20:34 - Robin Mills

#1040. Added test regression detector.

Revision 3643 - 25 Mar 2015 20:54 - Robin Mills

#784 and #1040. Test regression detector.

Revision 3657 - 03 Apr 2015 16:03 - Alan Pater

#1040 doc template for mwg-kw schema

History

#1 - 12 Mar 2015 20:49 - Alan Pater

- File *mwg-kw.test.jpg* added

#2 - 13 Mar 2015 22:41 - Robin Mills

- Status changed from New to Assigned

- Target version set to 0.25

Thanks very much for providing this, Alan. I'll have a look at this and submit it over the weekend.

#3 - 24 Mar 2015 21:18 - Thomas Beutlich

Patch is working. This is the output of the XMP dump of the provided test file:

```
Xmp.mwg-kw.Keywords XmpText 0 type="Struct"
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy XmpText 0 type="Bag"
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy[1] XmpText 0 type="Struct"
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy[1]/mwg-kw:Keyword XmpText 3 cat
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy[1]/mwg-kw:Children XmpText 0 type="Bag"
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy[1]/mwg-kw:Children[1] XmpText 0 type="Struct"
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy[1]/mwg-kw:Children[1]/mwg-kw:Keyword XmpText 7 Siamese
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy[2] XmpText 0 type="Struct"
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy[2]/mwg-kw:Keyword XmpText 7 Felidae
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy[2]/mwg-kw:Children XmpText 0 type="Bag"
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy[2]/mwg-kw:Children[1] XmpText 0 type="Struct"
Xmp.mwg-kw.Keywords/mwg-kw:Hierarchy[2]/mwg-kw:Children[1]/mwg-kw:Keyword XmpText 6 Jaguar
```

It messes up the layout but I guess this is general problem with long identifiers of hierarchical data.

#4 - 24 Mar 2015 22:14 - Robin Mills

Patch submitted. [r3633](#). Thanks to Alan for reporting and providing the patch. Thanks to Thomas for validating the fix.

Thanks for looking at this Thomas, it has been on my TODO list for more than a week. ([#1042](#)/[#1043](#) have been time-consuming). I think we should about add the test file to the test harness.

Alan: is there any reason (example copyright) to prevent us from copying your test file (mwg-kw.test.jpg) into our test suite? It will probably be renamed exiv2-bug1040.jpg to fit the name pattern of the test files.

#5 - 24 Mar 2015 22:23 - Alan Pater

Very cool! Thank you Thomas and Robin!

Yes, go ahead and include the test image into the test suite. It can be considered to be in the public domain. Next time I'll be sure to include a Creative Commons statement to that effect.

#6 - 24 Mar 2015 22:34 - Robin Mills

- Assignee changed from Alan Pater to Robin Mills

Thanks Alan. I'm not a legal guy and easily confused by all the different license types. And I'm not sure how to record the license. Perhaps it should be put as a Exif.Photo.UserComment in the jpg.

I've changed the Assignee to myself to add Alan's file to the test suite and to update the test suite code appropriately. When tomorrow's build with the test changes is successful on our build/test server, I'll mark this as "Resolved".

#7 - 25 Mar 2015 20:55 - Robin Mills

Submitted: [r3642](#) and [r3543](#)

Alan:

I've added a test to make ensure the output of the command `$ exiv2 -px mwg-kw.test.jpg` is always the same as Thomas reports in Item3 above.

I'm a little confused by the discussion about the spelling of hierarchy. I've also added a parallel test on the file you provided for [#784](#)

```
$ exiv2 -px exiv2.lr.jpg # renamed to exiv2-bug784.jpg
Xmp.dc.format                XmpText    10  image/jpeg
Xmp.dc.rights                LangAlt     1  lang="x-default" Public Domain. Do whatever you like with this image
Xmp.dc.subject               XmpBag      6  1st, 2nd, next1, next2, root, root0
Xmp.xmpMM.DocumentID        XmpText    32  004D48F936062EF5085A81BF96D4C494
Xmp.xmpMM.OriginalDocumentID XmpText    32  004D48F936062EF5085A81BF96D4C494
Xmp.xmpMM.InstanceID        XmpText    44  xmp.iid:f74f0d02-e921-134e-8107-1dda17aad853
Xmp.xmpMM.History           XmpText     0  type="Seq"
Xmp.xmpMM.History[1]       XmpText     0  type="Struct"
Xmp.xmpMM.History[1]/stEvt:action XmpText     5  saved
Xmp.xmpMM.History[1]/stEvt:instanceID XmpText    44  xmp.iid:f74f0d02-e921-134e-8107-1dda17aad853
Xmp.xmpMM.History[1]/stEvt:when XmpText    25  2015-03-24T20:35:55-05:00
Xmp.xmpMM.History[1]/stEvt:softwareAgent XmpText    39  Adobe Photoshop Lightroom 4.4 (Windows)
Xmp.xmpMM.History[1]/stEvt:changed XmpText     9  /metadata
Xmp.xmp.MetadataDate        XmpText    25  2015-03-24T20:35:55-05:00
Xmp.crs.RawFileName         XmpText    12  exiv2.lr.jpg
Xmp.lr.hierarchicalSubject  XmpBag      2  root|next1|next2, root|1st|2nd
894 rmills@rmillsmbp:~/gnu/exiv2/trunk/test $
```

I hope these are the correct tests and we can mark both issues [#1040](#) and [#784](#) as resolved.

#8 - 25 Mar 2015 20:58 - Robin Mills

- Assignee changed from Robin Mills to Alan Pater

Alan:

I hope I've got this right. If you're happy, please change the status to "Resolved" and we're done. If further action is required, please assign it to me (or Thomas) and explain what needs attention.

#9 - 26 Mar 2015 13:28 - Alan Pater

- Status changed from Assigned to Resolved

Looks good to me! I confirmed interoperability with exiftool.

#10 - 08 May 2015 16:23 - Alan Pater

- % Done changed from 50 to 100

#11 - 21 Jun 2015 16:39 - Andreas Huggel

- Status changed from Resolved to Closed

Files

mwg-kw.patch	4.01 KB	12 Mar 2015	Alan Pater
mwg-kw.test.jpg	26.3 KB	12 Mar 2015	Alan Pater