

## Exiv2 - Feature #1040

### MWG-KW schema

12 Mar 2015 20:40 - Alan Pater

<b>Status:</b>	Closed	<b>Start date:</b>	12 Mar 2015
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Alan Pater	<b>% Done:</b>	100%
<b>Category:</b>	metadata	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	0.25		
<b>Description</b>			
<p>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.</p> <p>Exiftool has included support for this schema for some time. With this patch, exiv2 can create and modify these hierarchical keywords as well.</p> <p>I have tested against exiftool and not seen any errors.</p>			
<b>Related issues:</b>			
Related to Exiv2 - Bug # 784: Writing Xmp.Ir.hierarchicalSubject writes wrong...		<b>Closed</b>	<b>02 Aug 2011</b>

#### 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 root0|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**

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