

**Breeze Browser Pro**  
**EXIF / IPTC Description Field/Tag Population Bug**  
**Test Conclusions and Bug Fix/Enhancement Requests**

**Problem/Bug:** BBP not populating EXIF comment/description from IPTC Description

**Scope:** Problem/bug affects all BBP users who need to replicate IPTC description to EXIF description for JPG images. (This issue may affect other image types as well, I only tested JPG.) Impact is across all images used with any tool or environment, i.e. web photo hosting service, that defaults to or requires the use of EXIF data fields and/or does not support XMP data.

**Specific Scenario:**

**Goal:** optimize workflow around DP and BBP

**Workflow segment:** image preparation for upload to Gallery2

**Challenge:** Gallery2 limited to EXIF description for image caption

**Workflow environment:**

- Windows: XP Pro, SP2

**Workflow tools:**

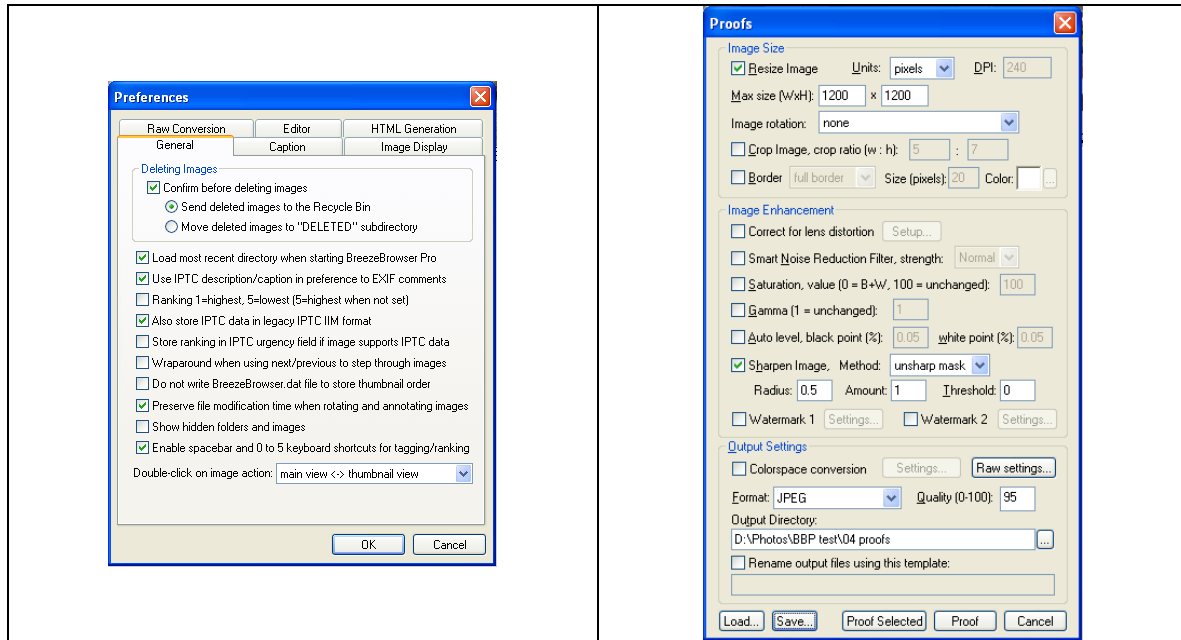
- DP: v2.0.4
- BBP: v1.7.3.1
- Canon Digital Photo Professional 3.1.0.0 (used for RAW conversion)
- RoboGEO 5.3.9 (used to insert GPS data when DP cannot find an matching track point)

**Test tool environment:**

- ExifToolGUI: v3.11
- ExifTool by Phil Harvey: v7.25
- Opanda IEXIF 2.3
- Exifer 2.1.5
- Adobe Photoshop CS2 9.0.2
- Adobe Bridge CS2 1.0.4.6
- Paint Shop Pro 9.01

**Sample folders and files at:** [www.hackneys.com/photos/bbp-test](http://www.hackneys.com/photos/bbp-test)

## BBP Preferences



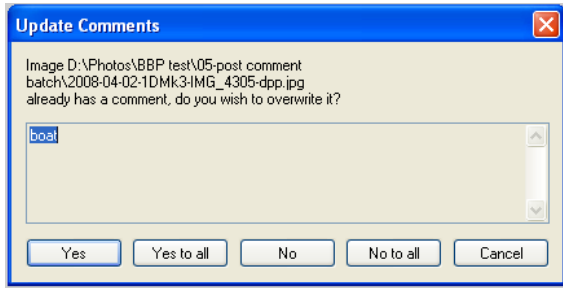
## Test Methodology

1. Create test set – four description test images, one from each primary camera body (Canon 1DMk3, Canon 30D, Canon SD870, Canon SD800); and one sample EXIF description image
2. Using BBP, move and copy images to relevant folders in test folder structure
3. Using Exifer, create sample EXIF description in EXIF sample image
4. Using BBP, create IPTC description in each image via Edit>Edit IPTC/XMP Data menu option dialog box
5. Check for meta data and EXIF description in output images using test suite - no joy
6. Using BBP, create 1200 pixel size JPG proof files
7. Check for meta data and EXIF description in output images using test suite - no joy
8. Using BBP, copy proof files to “post batch” folder
9. Using BBP thumbnail view, select all images in post batch folder
10. Open BBP edit comments dialog box
11. Enter @IPTC\_description@, click “Apply Selected” button.
12. Select “overwrite all” button in response to Update Comments dialog box
13. Check for meta data and EXIF description in output images using test suite - no joy
14. Using BBP, delete images from “post batch” folder
15. Using BBP, copy proof files to “post batch” folder
16. Change BBP preferences – deselect “Use IPTC description/comments...”
17. Using BBP thumbnail view, select all images in post batch folder
18. Open BBP edit comments dialog box
19. Enter @IPTC\_description@, click “Apply Selected” button.
20. Select “overwrite all” button in response to Update Comments dialog box
21. Receive error message, error writing comments to files (all files that do not have an EXIF user comment field)
22. Select “OK” button in error dialog
23. Check for meta data and EXIF description in output images using test suite, no joy

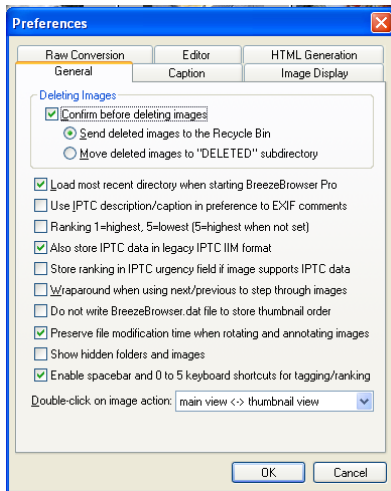
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Test Process Dialog Boxes

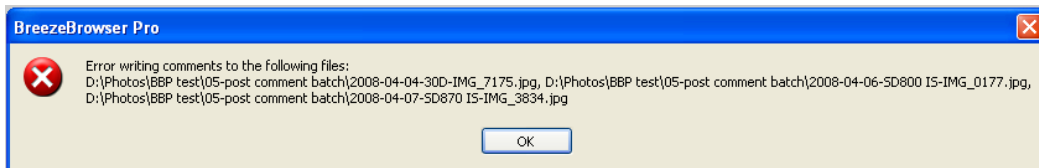
Steps 12 and 20:



Step 16:



Step 21:

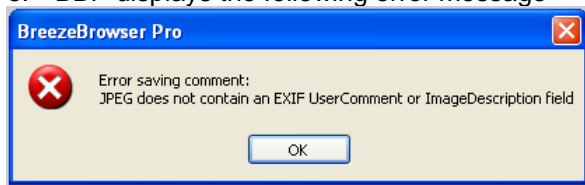


**Test Results Logic Box**

Existing EXIF Description Field	Existing IPTC Description	BBP Create EXIF Description
Y	N	Y
Y	Y	Y
N	N	Y
N	Y	N

## Conclusions

1. BBP has the ability to create and populate the EXIF User Comment/Description field in files with no pre-existing EXIF User Comment/Description field and no pre-existing IPTC description:
  - a. Deselect "Use IPTC description/comments..." in preferences
  - b. Select an image that contains no pre-existing EXIF User Comment/Description field and no pre-existing IPTC description
  - c. Use the "Edit Comments" dialog box
  - d. Click the "Apply" button
  - e. Check image file with EXIF utility - success
2. BBP does not create an EXIF comment/description from an IPTC description unless the EXIF User Comment/Description field already exists in the image file structure, even though it has the capability to do so as demonstrated in conclusion #1.
3. For an image file with no pre-existing EXIF User Comment/Description field and an existing IPTC description it is not possible to manually copy the image's IPTC description into the EXIF "Edit Comments" dialog box and save the change.
  - a. Deselect "Use IPTC description/comments..." in preferences
  - b. Select an image that contains no pre-existing EXIF User Comment/Description field and contains a pre-existing IPTC description
  - c. Use the "Edit Comments" dialog box
  - d. Click the "Apply" button
  - e. BBP displays the following error message



4. For a group of image files with no pre-existing EXIF User Comment/Description field and an existing IPTC description it is not possible to enter @IPTC\_description@ into the EXIF "Edit Comments" dialog box and apply the change to the selected images.
  - a. Deselect "Use IPTC description/comments..." in preferences
  - b. Select images that contain no pre-existing EXIF User Comment/Description field and contain a pre-existing IPTC description
  - c. Open the "Edit Comments" dialog box
  - d. Enter @IPTC\_description@
  - e. Click the "Apply Selected" button
  - f. BBP displays the following error message



## Bug Fix / Enhancement Submissions

1. Clearly label the "Edit Comments" dialog box to reflect its state and purpose, i.e. EXIF Comments.
2. Clearly label the User Comment / Description displayed in filmstrip and full views as to their source, i.e. EXIF, IPTC (legacy), or IPTC/XMP.
3. Use the capability demonstrated in conclusion #1, i.e. the ability to create and populate an EXIF User Comment / Description field in an image file that contains no pre-existing EXIF User Comment / Description field, to enable population of the EXIF User Comment / Description field from the IPTC Description field on both a manual and @IPTC\_description@ batch basis.
4. Enable manual and batch replication of all relevant IPTC fields to EXIF fields, i.e. owner/creator, description, copyright, etc.

**Workaround:**

This is a workaround for the BBP XMP/EXIF meta data field bug.

It utilizes a free windows command line exif utility. For those of you on UNIX or MAC environments, there is a PERL version of the utility that runs on just about anything.

**Requirements:**

1. An unzipped copy of the Windows command line exiftools utility by Phil Harvey available here: <http://www.sno.phy.queensu.ca/~phil/exiftool/>

Download the windows executable and the Perl library version. You will eventually want the HTML documentation files in the Perl version.

2. The batch file and parameter files here: <http://www.hackneys.com/photos/bbp-test/>
  - a. [BBP-xmp2exif-usingargsfile.bat](#)
  - b. [bbp-xmp2exif.args](#)

**Configuration:**

1. Unzip the exiftool utility.
2. Rename the utility exiftool.exe
3. Copy the exiftool.exe file to your windows folder or on your system path
4. Copy the batch file and parameter file to the folder with the files you wish to process

**Utilization:**

1. In BBP, enable preference "Use IPTC description/caption..."
2. Use BBP "Edit>Edit XMP/IPTC Data" dialogs to populate image meta data.
3. Open Windows Explorer
4. Navigate to the folder where you placed the batch file and parameter file containing the JPG files you wish to process
5. Double click on the batch file BBP-xmp2exif-usingargsfile.bat
6. All relevant XMP/IPTC meta data created by BBP is copied into the corresponding EXIF meta data fields and will be available to applications and web services that are limited to or require EXIF data.

**Notes:**

1. This batch file will overwrite the original JPG files with the new EXIF data fields populated.  
**>>>> It is recommended that you have a backup copy of your JPG files. <<<<**
2. The parameter file makes the following associations. The XMP meta data fields are written to the corresponding EXIF fields. If no corresponding EXIF field exists, it is created and all meta data file internal pointers are updated accordingly.
  - a) Image title to EXIF  
-XMP-dc:Title > EXIF:ImageDescription
  - b) Image description to EXIF  
-XMP-dc:Description > EXIF:UserComment
  - c) Image description to JPEG comment  
-XMP-dc:Description > Comment
  - d) Image creator to EXIF  
-XMP-dc:Creator > EXIF:Artist
  - e) Copyright statement to EXIF  
-XMP-dc:Rights > EXIF:Copyright

If you desire or require additional EXIF fields to be populated you can edit the parameter file.

The parameter file can also be edited to enable population of IPTC fields from XMP fields. This is useful if you did not have the "Also store IPTC data in legacy..." preference enabled and desire to populate your files' IPTC data fields. Note that some applications do not support XMP and require the IPTC fields to be explicitly populated.

**Workaround Documentation**

The batch and parameter files are documented internally. Open with any text editor.

To learn more about the exiftool commands and options used, refer to the HTML documentation files included with the Perl utility set.

The relevant XMP/IPTC/EXIF/JPEG meta data fields used in the workaround are documented here: <http://www.hackneys.com/photos/bbp-test/bbp-xmp2exifmetadafields.pdf>

## Utility Batch Files

Here are some useful batch files I put together while building the workaround. They display the available meta data fields in a jpg file.

All require the same prerequisites as the workaround.

If you want to map different or additional EXIF, IPTC or XMP meta data fields you will first need to learn what your camera uses as field (tag) names for the values you are interested in.

In order to do that I created three batch files to create three different text files of meta data information: EXIF, XMP and All.

Once these files are created for files from any given camera you will have the information you need to modify the parameter file to map any source field to any target field.

All of these batch files use an image file named sample.jpg. I provided a sample.jpg file here to get you started: <http://www.hackneys.com/photos/bbp-test/sample.jpg>

All batch files create corresponding txt files of their output that can be opened in any text editor.

### Notes:

1. You must eliminate any spaces in tag names, i.e. User Comment needs to be UserComment for the mapping to work.
2. An XL spreadsheet that automates the creation of the code strings for use in the parameter file is here: <http://www.hackneys.com/photos/bbp-test/bbp-xmp2exifmetadadatafields.xls>

### Batch Files:

#### 1. list-exif-tags-sample.bat

Batch to display all available EXIF meta data fields (tags) for a jpg file.

Available here: <http://www.hackneys.com/photos/bbp-test/list-exif-tags-sample.bat>

To use:

- a. create a copy of a jpg you are interested in, i.e. for a specific camera
- b. rename the copy sample.jpg
- c. put the list-exif-tags-sample.bat in the same folder as the jpg
- d. open windows explorer
- e. double click on list-exif-tags-sample.bat

A sample of the output of this batch file is here:

<http://www.hackneys.com/photos/bbp-test/sample-exiflist.txt>

#### 2. list-XMP-tags-sample.bat

Batch to display all available XMP meta data fields (tags) for a jpg file.

Available here: <http://www.hackneys.com/photos/bbp-test/list-xmp-tags-sample.bat>

To use:

- a. create a copy of a jpg you are interested in, i.e. for a specific camera
- b. rename the copy sample.jpg
- c. put the list-xmp-tags-sample.bat in the same folder as the jpg
- d. open windows explorer
- e. double click on list-xmp-tags-sample.bat

A sample of the output of this batch file is here:

<http://www.hackneys.com/photos/bbp-test/sample-xmplist.txt>

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3. list-metadata-tags-sample.bat

Batch to display all available meta data fields (tags) for a jpg file.

Available here: <http://www.hackneys.com/photos/bbp-test/list-metadata-tags-sample.bat>

To use:

- a. create a copy of a jpg you are interested in, i.e. for a specific camera
- b. rename the copy sample.jpg
- c. put the list-metadata-tags-sample.bat in the same folder as the jpg
- d. open windows explorer
- e. double click on list-metadata-tags-sample.bat

A sample of the output of this batch file is here:

<http://www.hackneys.com/photos/bbp-test/sample-metadatalist.txt>