

## Exiv2 - Bug #497

### exiv2 tool doesn't respect unix file rights

23 Nov 2006 05:16 - fabien -

|  |                |                        |           |
|--|----------------|------------------------|-----------|
| <b>Status:</b>   | Closed         | <b>Start date:</b>     |           |
| <b>Priority:</b>   | Normal         | <b>Due date:</b>       |           |
| <b>Assignee:</b>   | Andreas Huggel | <b>% Done:</b>         | 0%        |
| <b>Category:</b>   | tools          | <b>Estimated time:</b> | 0.00 hour |
| <b>Target version:</b>   | 0.13           |                        |           |
| <b>Description</b>   |                |                        |           |
| If I try to modify a file that has 0400 unix right, exiv2 will do it without any warning and will change the file right using the default umask. |                |                        |           |
| Eg:  |                |                        |           |
| 1. ls <del>l</del> img_3415.jpg  |                |                        |           |
| r----- 1 fabien fabien 2590332 Oct 23 20:18 img_3415.jpg#  |                |                        |           |
| 2. exiv2 -M"add lptc.Application2.Credit String Fabien" img_3415.jpg#  |                |                        |           |
| 3. ls <del>l</del> img_3415.jpg  |                |                        |           |
| -rw-r--r- 1 fabien fabien 2590374 Nov 23 14:12 img_3415.jpg#   |                |                        |           |
| 4. exiv2 -pi img_3415.jpg  |                |                        |           |
| lptc.Application2.Credit                    String    6 Fabien   |                |                        |           |
| I think it should refuse to modify the file except if -f is used, and keep the original unix rights.   |                |                        |           |

## History

### #1 - 25 Nov 2006 03:16 - Andreas Huggel

I'd agree with the complaint about changed access rights. But the notion of "respecting UNIX file rights" is strange. The system must enforce these settings.

And I can't reproduce this (tried with exiv2-0.10 and SVN Rev 993)

When run as user ahuggel:

```
drwxr-xr-x 2 ahuggel ahuggel 4096 25-Nov-06 ./
drwxr-xr-x 8 ahuggel ahuggel 8192 25-Nov-06 ../
r----- 1 ahuggel ahuggel 4823 25-Nov-06 exiv2-empty.jpg
ahuggel@mowgli> ./exiv2 -M"add lptc.Application2.Credit String Fabien" exiv2-empty.jpg
Exiv2 exception in modify action for file exiv2-empty.jpg:
exiv2-empty.jpg: Failed to open file (w+b): Permission denied (13)
```

When I switch to root user, I can write the file (as expected), but the permissions remain the same:

```
ahuggel@mowgli> su root
Password:
mowgli:/home/ahuggel/src/exiv2/src/tmp# ./exiv2 M"add lptc.Application2.Credit String Fabien" exiv2-empty.jpg
mowgli:/home/ahuggel/src/exiv2/src/tmp# ls -la
total 36
drwxr-xr-x 2 ahuggel ahuggel 4096 2006-11-25 18:54 ./
drwxr-xr-x 8 ahuggel ahuggel 8192 2006-11-25 18:49 ../
```

```
✦—— 1 ahuggel ahuggel 4865 2006-11-25 19:09 exiv2-empty.jpg
mowgli:/home/ahuggel/src/exiv2/src/tmp# ../exiv2 -pi exiv2-empty.jpg
lptc.Application2.Credit          String    6 Fabien
mowgli:/home/ahuggel/src/exiv2/src/tmp#
```

Please provide more info:

- platform info
- exiv2 version
- ls -la `which exiv2`
- the user who is running exiv2 in your example

...

-ahu.

#### **#2 - 25 Nov 2006 10:38 - fabien -**

I did more tests about that.

I reproduced the bugs on 2 systems :

- dual-optimizer (dual core) with linux x86\_64 bit (ubuntu 6.0.6)
- Athlon 64 with linux x86\_32 bit (ubuntu 6.0.6)

I tried with svn rev 992 and rev 994.

But, on a 3rd system (Intel Pentium m x86\_32), it works as expected...

What I could see using strace is that on the systems where there is the bug, a new file is created, then the old file is removed and new is renamed. I can't make more tests now, but I will give more informations in a few days...

#### **#3 - 26 Nov 2006 04:59 - Andreas Huggel**

What you saw in the strace is right. This is how the modified file is written.

I'll release 0.12 without this, but I'm still interested in what's wrong here.

My tests were done on an Intel Pentium D dual core machine running Debian testing

```
ahuggel@mowgli> uname -a
```

```
Linux mowgli 2.6.15-1-686-smp #2 SMP Mon Mar 6 15:34:50 UTC 2006 i686 GNU/Linux
```

#### **#4 - 27 Nov 2006 08:54 - fabien -**

Ok, I think the problem is related to the image file.

I attached 2 files :

- img\_3522\_overwrite.jpg which is the original file
- img\_3522.jpg which is a part of this file (cropped and saved with showfoto).

On the original file, the bug is present, but not with the 2nd file (produced by showfoto)...

#### **#5 - 28 Nov 2006 06:33 - fabien -**

I added 3 files, output of strace :

- strace\_img\_3522 => with img\_3522.jpg in mode 0400
- strace\_img\_3522\_in\_rw => with img\_3522.jpg in mode 0644
- strace\_img\_3522\_overwrite => with img\_3522\_overwrite.jpg in mode 0400

**#6 - 30 Nov 2006 21:15 - Andreas Huggel**

Indeed, with img\_3522\_overwrite.jpg I can reproduce the problem.

**#7 - 30 Nov 2006 21:42 - Andreas Huggel**

The problem occurs for files >1 MB (up to 1MB exiv2 uses a memory buffer for the temporary image, > 1MB a temporary file)

**#8 - 01 Dec 2006 00:27 - Andreas Huggel**

r999

**#9 - 04 Dec 2006 03:07 - fabien -**

I tested the latest svn version (rev 1006), and this is what I get :

```
$ ~/myopt/bin/exiv2 -M"add lptc.Application2.Credit String Fabien" img_3403.jpg
Exiv2 exception in modify action for file img_3403.jpg:
img_3403.jpg: Failed to open file (w+b): Permission denied (13)
```

It looks ok, but a temporary file is created and not removed :

```
$ ls †
total 2946
-r----- 1 fabien fabien 1506574 2006-12-04 12:00 img_3403.jpg
-rw-r--r- 1 fabien fabien 1506574 2006-12-04 12:00 img_3403.jpg16144
```

**#10 - 05 Dec 2006 08:20 - Andreas Huggel**

Delete temporary file if user does not have write permissions. (It would be better not to write the temporary file in the first place but that leads to other issues.)

r1007

**Files**

|                           |         |             |               |
|---------------------------|---------|-------------|---------------|
| img_3522.jpg              | 378 KB  | 27 Nov 2006 | Redmine Admin |
| img_3522_overwrite.jpg    | 2.68 MB | 27 Nov 2006 | Redmine Admin |
| strace_img_3522           | 13.4 KB | 28 Nov 2006 | Redmine Admin |
| strace_img_3522_overwrite | 16.3 KB | 28 Nov 2006 | Redmine Admin |
| strace_img_3522_in_rw     | 13.5 KB | 28 Nov 2006 | Redmine Admin |