

## darktable - Bug #12277

### Incorrect behaviour of types.dt\_lua\_tag\_t.#

08/02/2018 12:47 AM - Christian G

<b>Status:</b>	New	<b>Start date:</b>	08/02/2018
<b>Priority:</b>	Low	<b>Due date:</b>	
<b>Assignee:</b>	Jérémy Rosen	<b>% Done:</b>	0%
<b>Category:</b>	Lua	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Affected Version:</b>	2.4.2	<b>bitness:</b>	64-bit
<b>System:</b>	Ubuntu	<b>hardware architecture:</b>	amd64/x86

#### Description

Accessing values of type `types.dt_lua_tag_t` by a numbered index (e.g. `types.dt_lua_tag_t[3]`) actually returns the images that have that tag attached to them, according to [documentation](#). But there seems to be an indexing bug:

- accessing the first value (`types.dt_lua_tag_t[1]`) crashes the application
- accessing the second value (`types.dt_lua_tag_t[2]`) returns the first image
- accessing the third value (`types.dt_lua_tag_t[3]`) returns the second image, etc.
- the length operator (`#types.dt_lua_tag_t`) returns the number of images attached with that tag **plus 1**

#### History

##### #1 - 09/12/2018 08:45 PM - Bill Ferguson

- File `tag_index_test.lua` added

Tried to recreate this problem and failed. Randomly tagged 6 images with "test" then wrote a script (attached) to check the results. The script returned the correct number of images and the correct image filenames.

##### #2 - 09/13/2018 11:35 PM - Christian G

Ok, I have to state description more precisely. This bug does not always occur, it occurred sometimes. When I run [tag\\_index\\_test.lua](#) now it generates expected results. I'll further observe this strange behaviour.

##### #3 - 09/14/2018 12:20 AM - Christian G

I did some further tests. Since I also observed problems using `ipairs()` on values of type `types.dt_lua_tag_t` before, I tried this again with your example script. I changed lines 18 - 21 from

```
for i = 1, #test_tag do
  dt.print_log("image is " .. test_tag[i].filename)
-- do
end
```

to

```
for _, image in ipairs(test_tag) do
  dt.print_log("image is " .. image.filename)
-- do
end
```

This leads to the following error:

```
LUA ERROR : incorrect index in database
```

Is this expected? I actually expected to iterate over each image tagged with test\_tag.

And second, does this behaviour maybe have something to do with the described bug above?

**#4 - 10/07/2018 11:32 PM - Christian G**

I could further isolate the error case stated in the ticket description. I have imported some images into darktable, which contained tags as jpg file meta information, which are converted into darktable tags. When applying [tag\\_index\\_test.lua](#) on one of these imported tags (I only changed line 15 to the name of that tag), the behaviour from the ticket description could be reproduced. After entering the loop in line 18 with i = 1 accessing test\_tag[1] crashed darktable.

So the bug is maybe related to imported tags only, i.e. tags imported from file meta information.

On the other hand the error "incorrect index in database", when using ipairs(), is strange as well.

**Files**

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tag_index_test.lua	483 Bytes	09/12/2018	Bill Ferguson
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