

TYPO3 Core - Bug #69274

Portrait Images rotated while file processing

2015-08-24 08:56 - Philipp Wrann

Status:	Closed	Start date:	2015-08-24
Priority:	Should have	Due date:	
Assignee:	Stefan Froemken	% Done:	100%
Category:	File Abstraction Layer (FAL)	Estimated time:	0.00 hour
Target version:		Complexity:	easy
TYPO3 Version:	7	Is Regression:	No
PHP Version:	5.6	Sprint Focus:	
Tags:			

Description

Many cameras today save pictures not rotated when making a portrait, they save it with some exif meta tag that turns the image in preview mode (90|180|270 deg).

Typo3 should take this into account after uploading. One of my customer has to rotate many pictures in preview program of OS to make it appear correctly in TYPO3.

Either rotate the image:

```
Imagemagicks convert has some -auto-orient option, that should do the job.
```

Here is some resource:

<http://stackoverflow.com/questions/19456036/detect-exif-orientation-and-rotate-image-using-imagemagick>

Or take the exif-information simply into account in all places and provide optionally a button to reset it (like in preview programs).

Related issues:

Related to TYPO3 Core - Bug #61655: Image rescaling breaks/ignores exif orien...	Closed	2014-09-16
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Associated revisions

Revision 5179ff93 - 2018-05-18 16:06 - Stefan Froemken

[FEATURE] Preserve image rotation if orient is saved in exif

Some digicams like iPhone do not rotate images by default. They add a direction entry into the exif meta data.

ImageMagick can read this entry if -auto-orient is set.

The patch add the rotation detection to the ImageInfo object and the IM/GD commands that read files.

Resolves: #69274

Releases: master

Change-Id: I4b1193daf1c321a3d4beb8d76974012ee42470f6

Reviewed-on: <https://review.typo3.org/48079>

Tested-by: TYPO3com <no-reply@typo3.com>

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Reviewed-by: Markus Klein <markus.klein@typo3.org>

Tested-by: Markus Klein <markus.klein@typo3.org>

History

#1 - 2015-08-24 16:04 - Xavier Perseguers

- Status changed from New to Rejected

This is not a bug, when you upload an image, the Core of TYPO3 should not do any magick because changing the orientation modifies the actual

image you uploaded.

However, there is an easy solution for that, just install EXT:image_autoresize from TER and it will do exactly that (if you don't want to reduce size of uploaded images at all - why?) then just put some very high size threshold in the configuration.

#2 - 2015-08-25 09:51 - Philipp Wrann

I will have a look at that extension but why would it be so bad to include some functionality in the core? Or to simply make use of the orientation exif information?

At the moment you upload a portrait image (taken from iphone) and the image is displayed rotated - if the exif orientation is set it should be taken into account when creating processed images, dont you think?

IMO this should really work out of the box.

So okay - imagemagick convert is no solution - but taking the exif rotate property into account when dealing with images IS.

#3 - 2015-11-06 13:42 - Christiaan Wiesenecker

I think Philipp Wrann is totally right. Ignoring the orientation IS doing magic to the original file... TYPO3 core should respect the exif's

#4 - 2016-04-25 09:24 - Mr Fondolz

Why was this bug rejected? It is an issue how typo3 is using image magick. It should be atleast a setting in the [GFX] part of the installer. Using or developing an extension for this basic functionality is too much....

I currently use the option [GFX][im_useStripProfileByDefault] so i can use [GFX][im_stripProfileCommand] with "-auto-orient +profile "" and every uploaded image will be fine.

#5 - 2016-05-11 12:11 - Xavier Perseguers

For the record, ImageMagick is known to be much more vulnerable than GraphicsMagick and you may have a look into the code from EXT:image_autoresize how I had to handle the reorientation when using GM, this is not a simple flag as in IM. Furthermore, this is definitely magick to **modify** the file when uploading. Taking the EXIF orientation into account, when displaying the image, is not the same as **changing** the file. When you rotate the picture, you are potentially changing its quality as well, since the pattern in JPEG chunks are not the same anymore.

Long story short, there are a few easy solutions that you came with:

- Install EXT:image_autoresize
- Modify the im_useStripProfileByDefault setting which works fine if you use IM

I don't see a need to do anything else in the Core.

#6 - 2016-05-11 14:37 - Stefan Froemken

- Subject changed from *Portrait Images rotated after uploading to Portrait Images rotated while file processing*
- Status changed from *Rejected to Accepted*
- Assignee set to *Stefan Froemken*
- Target version changed from *7.5 to 7.6.5*
- PHP Version set to *5.6*
- Complexity set to *easy*

As already told, we will not modify any file while upload.

But we can modify the thumb and image generation for Backend and Frontend.

I have changed the title and will create a new patch to add the new option in Installtool

#7 - 2016-05-11 16:03 - Gerrit Code Review

- Status changed from *Accepted to Under Review*

Patch set 1 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <https://review.typo3.org/48079>

#8 - 2016-05-12 11:21 - Gerrit Code Review

Patch set 2 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <https://review.typo3.org/48079>

#9 - 2016-07-05 11:53 - Benni Mack

- Target version changed from *7.6.5 to Candidate for patchlevel*

#10 - 2016-07-07 10:56 - Ruben Schmidmeister

Setting `-auto-orient` alone will only partially fix this issue, because the width/height calculation for image resizing still ignores the EXIF rotation. Replacing calls to the PHP function `getimagesize` with a custom function would fix the problem:

```
class ImageUtility
{
    /**
     * @param string $imageFile
     *
     * @return array
     */
    public static function getImageSize($imageFile)
    {
        $size = @getimagesize($imageFile);

        if ($size === FALSE) {
            return FALSE;
        }

        $exif = @exif_read_data($imageFile);

        $width = $size[ 0 ];
        $height = $size[ 1 ];

        // see: http://sylvana.net/jpegcrop/exif_orientation.html
        if (isset($exif[ 'Orientation' ]) && $exif[ 'Orientation' ] >= 5 && $exif[ 'Orientation' ] <= 8) {
            return [$height, $width];
        }

        return [$width, $height];
    }
}
```

I have experimented with an extension that overrides the following methods from the core: (only replaces calls to `getimagesize` with the function shown above)

- `\TYPO3\CMS\Core\Imaging\GraphicalFunctions->getImageDimensions`
- `\TYPO3\CMS\Core\Imaging\GraphicalFunctions->imageCreateFromFile`
- `\TYPO3\CMS\Core\Type\File\ImageInfo->getImageSizes`

and the images seem to be processed correctly.

#11 - 2017-09-06 20:37 - Markus Klösges

I also got caught by this. Exif rotation is applied if the corresponding flag is set in `LocalConfiguration`, but using such a rotated file inside of `GIFBUILDER` leads to wrong output dimensions. @Ruben, I tried your solution without luck, do you have any newer input on that issue?

#12 - 2017-09-11 09:29 - Ruben Schmidmeister

@Markus Since posting that comment I have fixing the behavior of the image processing might not be the best solution.

(Browsers display images with an EXIF orientation incorrectly so we would have to process all those images to make sure the images are displayed properly.)

(Shameless self-advertising ahead ;-)

However, I did create an extension that creates a button to "apply" the EXIF orientation on such images:

https://github.com/bash/exif_orientation_helper

#13 - 2017-09-21 10:08 - Gerrit Code Review

Patch set 3 for branch `master` of project `Packages/TYPO3.CMS` has been pushed to the review server.

It is available at <https://review.typo3.org/48079>

#14 - 2017-09-22 17:14 - Gerrit Code Review

Patch set 4 for branch `master` of project `Packages/TYPO3.CMS` has been pushed to the review server.

It is available at <https://review.typo3.org/48079>

#15 - 2017-09-22 17:49 - Gerrit Code Review

Patch set 5 for branch `master` of project `Packages/TYPO3.CMS` has been pushed to the review server.

It is available at <https://review.typo3.org/48079>

#16 - 2017-09-23 19:33 - Riccardo De Contardi

- Related to Bug #61655: Image rescaling breaks/ignores exif orientation added

#17 - 2017-10-02 23:21 - Gerrit Code Review

Patch set 6 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/48079>

#18 - 2017-11-24 21:56 - Benni Mack

- *Sprint Focus set to On Location Sprint*

#19 - 2017-11-30 11:05 - Tomas Norre Mikkelsen

I've been considering this issue.. and from my point of view this is a task for the editors not for the CMS.. Of course it would be nice if the system supports the editors, but images are always a little sensitive topic.

It's content and it has to be verified by the Editor anyway.. I wouldn't invest more time in this.

I would reject this issue.

#20 - 2017-11-30 12:56 - Markus Timtner

At least the image editing tool should offer the option to rotate images - it is something a user would expect if a tool calls itself image "editor" Nearly all of my editors are complaining about the missing rotation option. (or the image editing tool should be called "cropping tool" otherwise.)

@#12 Ruben Schmidmeister

Thank you very much for your work, will have a look into that.

#21 - 2018-03-14 21:22 - Gerrit Code Review

Patch set 7 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/48079>

#22 - 2018-03-14 21:26 - Gerrit Code Review

Patch set 8 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/48079>

#23 - 2018-03-14 21:27 - Gerrit Code Review

Patch set 9 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/48079>

#24 - 2018-03-15 16:42 - Mathias Brodala

- *Sprint Focus deleted (On Location Sprint)*

#25 - 2018-05-16 21:47 - Gerrit Code Review

Patch set 10 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/48079>

#26 - 2018-05-16 22:23 - Gerrit Code Review

Patch set 11 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/48079>

#27 - 2018-05-18 15:39 - Gerrit Code Review

Patch set 12 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/48079>

#28 - 2018-05-18 15:46 - Markus Klein

- *File Exif Left Bottom Test Image.JPG added*

- *Target version deleted (Candidate for patchlevel)*

#29 - 2018-05-18 16:30 - Stefan Froemken

- *Status changed from Under Review to Resolved*

- *% Done changed from 0 to 100*

Applied in changeset [5179ff93181cf85bf5e401da63e1194b0a25716e](#).

#30 - 2018-10-02 11:31 - Benni Mack

- *Status changed from Resolved to Closed*

Files

Exif Left Bottom Test Image.JPG	1.02 MB	2018-05-18	Markus Klein
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