Hw5 - PartA

309552005 吳偉誠

1.

PHP Version 7.3.28-2+ubuntu18.04.1+deb.sury.org+1

System	Linux wulearn-VirtualBox 5.4.0-42-generic #46~18.04.1-Ubuntu SMP Fri Jul 10 07:21:24 UTC 2020 x86_64
Build Date	Jun 4 2021 21:23:19
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/7.3/apache2
Loaded Configuration File	/etc/php/7.3/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/7.3/apache2/conf.d
Additional .ini files parsed	/etc/php/7.3/apache2/conf.d/10-mysqlnd.ini, /etc/php/7.3/apache2/conf.d/10-opcache.ini, /etc/php/7.3/apache2/conf.d/10-pdo.ini, /etc/php/7.3/apache2/conf.d/20-calendar.ini, /etc/php/7.3/apache2/conf.d/20-ctype.ini, /etc/php/7.3/apache2/conf.d/20-exif.ini, /etc/php/7.3/apache2/conf.d/20-fileinfo.ini, /etc/php/7.3/apache2/conf.d/20-ftp.ini, /etc/php/7.3/apache2/conf.d/20-gd.ini, /etc/php/7.3/apache2/conf.d/20-gettext.ini, /etc/php/7.3/apache2/conf.d/20-iconv.ini, /etc/php/7.3/apache2/conf.d/20-imagick.ini, /etc/php/7.3/apache2/conf.d/20-json.ini, /etc/php/7.3/apache2/conf.d/20-mysqli.ini, /etc/php/7.3/apache2/conf.d/20-pdo_mysql.ini, /etc/php/7.3/apache2/conf.d/20-phar.ini, /etc/php/7.3/apache2/conf.d/20-posix.ini, /etc/php/7.3/apache2/conf.d/20-readline.ini, /etc/php/7.3/apache2/conf.d/20-shmop.ini, /etc/php/7.3/apache2/conf.d/20-sockets.ini, /etc/php/7.3/apache2/conf.d/20-sysvmsg.ini, /etc/php/7.3/apache2/conf.d/20-sysvsem.ini, /etc/php/7.3/apache2/conf.d/20-sysvshm.ini, /etc/php/7.3/apache2/conf.d/20-tokenizer.ini
PHP API	20180731
PHP Extension	20180731
Zend Extension	320180731
Zend Extension Build	API320180731,NTS
PHP Extension Build	API20180731,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	disabled
IPv6 Support	enabled
DTrace Support	available, disabled
Registered PHP Streams	https, ftps, compress.zlib, php, file, glob, data, http, ftp, phar
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, tls, tlsv1.0, tlsv1.1, tlsv1.2
Registered Stream Filters	zlib.*, string.rot13, string.toupper, string.tolower, string.strip_tags, convert.*, consumed, dechunk, convert.iconv.*

imagick

imagick module	enabled
imagick module version	3.4.4
imagick classes	Imagick, ImagickDraw, ImagickPixel, ImagickPixelIterator, ImagickKernel
Imagick compiled with ImageMagick version	ImageMagick 6.9.7-4 Q16 x86_64 20170114 http://www.imagemagick.org
Imagick using ImageMagick library version	ImageMagick 6.9.7-4 Q16 x86_64 20170114 http://www.imagemagick.org
ImageMagick copyright	© 1999-2017 ImageMagick Studio LLC
ImageMagick release date	20170114
ImageMagick number of supported formats:	230
ImageMagick supported formats	3FR, AAI, AI, ART, ARW, AVI, AVS, BGR, BGRA, BGRO, BIE, BMP, BMP2, BMP3, BRF, CAL, CALS, CANVAS, CAPTION, CIN, CIP, CLIP, CMYK, CMYKA, CR2, CRW, CUR, CUT, DATA, DCM, DCR, DCX, DDS, DFONT, DJVU, DNG, DOT, DPX, DXT1, DXT5, EPDF, EPI, EPS, EPS2, EPS3, EPSF, EPSI, EPT, EPT2, EPT3, ERF, EXR, FAX, FILE, FITS, FRACTAL, FTP, FTS, G3, G4, GIF, GIF87, GRADIENT, GRAY, GROUP4, GV, H, HALD, HDR, HISTOGRAM, HRZ, HTM, HTML, HTTP, HTTPS, ICB, ICO, ICON, IIQ, INFO, INLINE, IPL, ISOBRL, ISOBRL6, JBG, JBIG, JNG, JNX, JPE, JPEG, JPG, JPS, JSON, K25, KDC, LABEL, M2V, M4V, MAC, MAGICK, MAP, MASK, MAT, MATTE, MEF, MIFF, MKV, MNG, MONO, MOV, MP4, MPC, MPEG, MPG, MRW, MSL, MSVG, MTV, MVG, NEF, NRW, NULL, ORF, OTB, OTF, PAL, PALM, PAM, PANGO, PATTERN, PBM, PCD, PCDS, PCL, PCT, PCX, PDB, PDF, PDFA, PEF, PES, PFA, PFB, PFM, PGM, PICON, PICT, PIX, PJPEG, PLASMA, PNG, PNG00, PNG24, PNG32, PNG48, PNG64, PNG8, PNM, PPM, PREVIEW, PS, PS2, PS3, PSB, PSD, PTIF, PWP, RADIAL-GRADIENT, RAF, RAS, RAW, RGB, RGBA, RGBO, RGF, RLA, RLE, RMF, RW2, SCR, SCT, SFW, SGI, SHTML, SIX, SIXEL, SPARSE-COLOR, SR2, SRF, STEGANO, SUN, SVG, SVGZ, TEXT, TGA, THUMBNAIL, TIFF, TIFF64, TILE, TIM, TTC, TTF, TXT, UBRL, UBRL6, UIL, UYVY, VDA, VICAR, VID, VIFF, VIPS, VST, WBMP, WMF, WMV, WMZ, WPG, X, X3F, XBM, XC, XCF, XPM, XPS, XV, XWD, YCbCr, YCbCrA, YUV

gd

GD Support	enabled
GD headers Version	2.3.0
GD library Version	2.2.5
FreeType Support	enabled
FreeType Linkage	with freetype
FreeType Version	2.8.1
GIF Read Support	enabled

GIF Create Support	enabled
JPEG Support	enabled
libJPEG Version	8
PNG Support	enabled
libPNG Version	1.6.34
WBMP Support	enabled
XPM Support	enabled
libXpm Version	30411
XBM Support	enabled
WebP Support	enabled

2.

```
wulearn@wulearn-VirtualBox:~$ sudo mysql -u root
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 108
Server version: 10.4.19-MariaDB-1:10.4.19+maria~bionic-log mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> USE wordpress_309552005; SHOW TABLES;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
+-------------------------------+
| Tables_in_wordpress_309552005 |
+-------------------------------+
| wp_commentmeta                |
| wp_comments                   |
| wp_links                      |
| wp_options                    |
| wp_postmeta                   |
| wp_posts                      |
| wp_term_relationships         |
| wp_term_taxonomy              |
| wp_termmeta                   |
| wp_terms                      |
| wp_usermeta                   |
| wp_users                      |
+-------------------------------+
12 rows in set (0.000 sec)

MariaDB [wordpress_309552005]>
```


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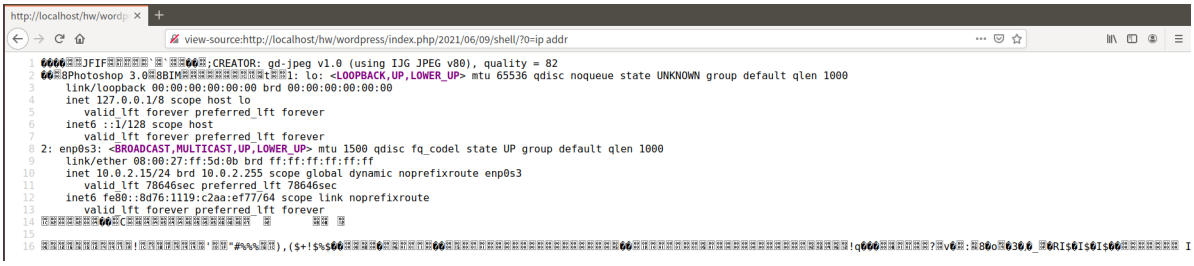
| wp_posts                      |
| wp_term_relationships         |
| wp_term_taxonomy              |
| wp_termmeta                   |
| wp_terms                      |
| wp_usermeta                   |
| wp_users                      |
```

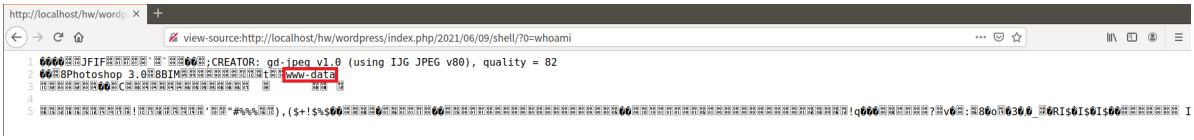
```
+--------------------------------+
12 rows in set (0.000 sec)

MariaDB [wordpress_309552005]>
```

3.



4.



> www-data

5.

> ABCE
> "D" will not be executed.

6.

Because imageMagick won't strip our embedded data. It will keep EXIF IPTC metadata, including copyright, color profile, and contact information embedded in the resized images.

No.
This information(use IPTC and EXIF metadata to embed color profile, copyright, and other information into their images) is stripped out when WordPress uses the GD image library to resize images.

Reference:
https://aoxoa.co/wordpress-exif-iptc-metadata-resized-images/

WordPress Stripping Metadata

Photographers use IPTC and EXIF metadata to embed color profile, copyright, and other information into their images. This information is stripped out when WordPress uses the GD image library to resize images. The GD library also creates poor quality files that are soft and not very sharp.

Ditch GD Image Library

The shortcomings of the GD library can be overcome by using ImageMagick to resize images.

By default, ImageMagick won't strip your embedded data. It will keep EXIF IPTC metadata, including copyright, color profile, and contact information embedded in the resized images. Plus, it makes your resized images look better.

Unfortunately, your server needs to have ImageMagick installed and enabled. If you are on a shared server without ImageMagick, you probably won't be able get your hosts to install it. You'll have to switch to another host or another shared server that already has it installed. I recommend US-based WestHost for reliable web hosting that is affordable.

Many people, like Eddie, will tell you that the WordPress Image API uses ImageMagick by default if it is enabled on your server. That isn't completely true.