

## Upgrading Servers

Posted March 1st, 2024

Notes on upgrading to apache2.4.58/ php-8.3.1

Jan 11, 2024

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- need to have knowledge
- a) laravel
- b) symphony
- c) codeigniter
- d) nosql
- e) reactjs
- these are good blog topics
- more topics
- a) postgresql
- b) mongodb
- c) git

5:30pm - look at codeigniter

Php Configuration:

[https://www.codeigniter.com/user\\_guide/intro/requirements.html](https://www.codeigniter.com/user_guide/intro/requirements.html)

codeigniter requires a number of php extensions

- a) intl = php configure --enable-intl
- b) mbstring = php configure --enable-mbstring
- c) json = included by default
- d) mysqlnd = php configure --with-mysqli=mysqlnd
- e) curl = php configure --with-curl
- f) imagick = pecl install imagick
- g) gd = php configure --with-gd
- = php8 configure --enable-gd
- h) simplexml = enabled by default
- i) memcache = installed via pecl
- j) memcached = installed via pecl
- k) redis = installed via pecl
- l) dom = enabled by default
- m) libxml = enabled by default
- n) xdebug = pecl install xdebug

5:33pm - need to upgrade dev2 to php 8

I build php from source

Latest php version is 8.3.1

downloadable from <http://php.net>

pecl has a problem due to cacert.pem

configure php.ini

```
openssl.cafile=/usr/local/ssl/cacert.pem
```

```
cd /usr/local/ssl
```

```
wget http://curl.haxx.se/ca/cacert.pem
```

This will download the cacert.pem with the update ca certs

To see the cacert locations:

```
php -r "print_r(openssl_get_cert_locations());"
```

6:30pm - apache is out of data. Latest version is apache-2.4.58

7:11pm - so upgrade of php impacts the pearpkgs included by the software.

Had to modify pearpkgs/Pear.pm

Found bug in pearpkgs/MDB2/Mysqli.php

10:18pm - so it turns out that you can configure the php.ini to format the error outputs so its a little nicer in php.ini

```
html_errors=On
```

```
error_prepend_string="
```

```
error_append_string = "
```

```
";
```

12:32am - so since I upgraded mariadb when I switched servers the database will not accept a blank string into an integer.

This turns out to be a configuration set mariadb  
(mariadb is a version of mysql)  
select @@sql\_mode  
edit /etc/my.cnf.d/mariadb-server.cnf  
add  
sql\_mode=""

2:41am - recompiling php to include zlib  
./configure --with-zlib

3:56am - added browscap ini item in php.ini  
browscap=/usr/local/lib/php/php\_browscap.ini

4:09am - build apache 2.4.58 and of course rebuild php-8.3.1

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2:00pm - going to upgrade groupcorners to apache-2.4.58,php-8.3.1

2:42pm - php upgrade fails because its missing oniguruma-devel package.  
which apparently does not exist on redhat os 8.2

to get it:  
<https://github.com/kkos/oniguruma>  
download zip, and unzip it. Probably ignore the INSTALL  
read file.

to build it:  
yum install automake  
yum install autoconf  
autoreconf -fi  
./configure  
make  
make install

then modify your build script for php-8.3.1  
add before configure  
export PKG\_CONFIG\_PATH=\$PKG\_CONFIG\_PATH:/usr/local/lib/pkgconfig

6:41pm - got php-8.3.1 to compile without mbstring  
had to add CFLAGS=-fPIC to configure statement  
and remove -enable-mbstring  
need to enable zip and imagick -\*+90

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4:33 pm added zip to php  
pecl install zip

4:53pm install imagick on groupcorners.com  
so the standard install  
pecl install imagick - fails in php 8.3.0  
So get the source from <http://github.com/imagick>  
unzip imagick-master  
cd imagick-master  
phpize  
./configure  
make  
make install  
copy imagick.so from no-debug\* under /usr/local/lib/php/extensions  
to /usr/local/lib/php/extensions

10:06pm - so mbstring fails to compile in php.  
a) the LDFLAGS in configure is not honored, so you  
need to add anything in CFLAGS  
b) gcc is used to compile php, gcc uses binutils to  
link the objects. Apparently the binutils on  
redhat 8.9, which groupcorners is running is not  
high enough version. Apparently I need a version  
higher than 2.32 (groupcorners is running 2.30)

So.. the answer is recompile binutils, and recompile  
gcc - and use the new gcc to compile php.

11:54pm rebuilt php-8.3.1 with new gcc successfully.  
mbstring now compiles.

