

## 一、安装过程

下载相关php安装包, 进行解压, 进入安装包, 进行编译安装, 编译

```
1 ./configure \  
2 --prefix=/user/local/php74 \  
3 --with-config-file-path=/usr/local/php74/etc \  
4 --with-libdir=/usr/lib64 \  
5 --with-freetype=/usr/include/freetype2/freetype/ \  
6 --with-jpeg=/usr/lib64 \  
7 --disable-rpath \  
8 --enable-gd \  
9 --with-gettext \  
10 --with-mysqli \  
11 --with-iconv \  
12 --with-zip \  
13 --with-pdo-mysql \  
14 --with-pdo-sqlite \  
15 --with-xsl \  
16 --with-zlib \  
17 --with-bz2 \  
18 --with-mhash \  
19 --enable-fpm \  
20 --enable-pdo \  
21 --enable-session \  
22 --enable-simplexml \  
23 --enable-bcmath \  
24 --enable-mbregex \  
25 --enable-mbstring \  
26 --enable-opcache \  
27 --enable-pcntl \  
28 --enable-shmop \  
29 --enable-soap \  
30 --enable-sockets \  
31 --enable-sysvmsg \  
32 --enable-sysvsem \  
33 --enable-sysvshm \  
34 --enable-mysqlnd \  
35 --enable-xml \  
36 --enable-phar
```

如果没有报错就进行编译安装

make && make install

在进行make的时候报错如下：make: \*\*\* [ext/phar/phar.php]

解决方法如下：make ZEND\_EXTRA\_LIBS='-liconv'

## 二、问题排查

安装的过程中基本没出现什么问题，主要问题出现在php启动的时候，本次的环境是进行php版本升级，由7.2升级到7.4，安装成功后查看phpinfo信息总是显示php版本为7.2，无法切换到新安装的版本。通过分析发现，nginx是通过fastcgi进程管理器与php进行通信，php-fpm为进程管理器的一种，所以初步判断是nginx无法正常与php通信造成的，中间的主要遇到的问题如下：

1、手动启动php-fpm,访问系统提示502，查看日志报错如下：

```
location /prod-api/ {
    proxy_pass http://10.0.0.1:8081;
}

[root@qilin-v10 vmtest]# tail -10 /www/wwwlogs/nginx_error.log
2024/09/30 15:32:39 [crit] 9549448: *2956 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 63.144.107.30, server: 10.0.0.1, upstream: "fastcgi://unix:/tmp/php-cgi.sock", host: "pwt-admin.qita.cn"
2024/09/30 15:32:41 [crit] 9549448: *2956 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 63.144.107.30, server: 10.0.0.1, upstream: "fastcgi://unix:/tmp/php-cgi.sock", host: "pwt-admin.qita.cn"
2024/09/30 15:32:41 [crit] 9549448: *2956 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 10.0.0.1, server: 10.0.0.1, upstream: "fastcgi://unix:/tmp/php-cgi.sock", host: "pwt-admin.qita.cn"
2024/09/30 15:32:41 [crit] 9549448: *2956 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 10.0.0.1, server: 10.0.0.1, upstream: "fastcgi://unix:/tmp/php-cgi.sock", host: "pwt-admin.qita.cn"
2024/09/30 15:32:42 [crit] 9549448: *2957 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 10.0.0.1, server: 10.0.0.1, upstream: "fastcgi://unix:/tmp/php-cgi.sock", host: "pwt-admin.qita.cn"
2024/09/30 15:32:42 [crit] 9549448: *2957 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 10.0.0.1, server: 10.0.0.1, upstream: "fastcgi://unix:/tmp/php-cgi.sock", host: "pwt-admin.qita.cn"
2024/09/30 15:32:42 [crit] 9549448: *2957 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 10.0.0.1, server: 10.0.0.1, upstream: "fastcgi://unix:/tmp/php-cgi.sock", host: "pwt-admin.qita.cn"
2024/09/30 15:32:42 [crit] 9549448: *2957 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 10.0.0.1, server: 10.0.0.1, upstream: "fastcgi://unix:/tmp/php-cgi.sock", host: "pwt-admin.qita.cn"
2024/09/30 15:32:42 [crit] 9549448: *2957 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 10.0.0.1, server: 10.0.0.1, upstream: "fastcgi://unix:/tmp/php-cgi.sock", host: "pwt-admin.qita.cn"
2024/09/30 15:32:42 [crit] 9549448: *2957 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 10.0.0.1, server: 10.0.0.1, upstream: "fastcgi://unix:/tmp/php-cgi.sock", host: "pwt-admin.qita.cn"
```

主要报错原因为nginx和php-fpm的配置sock方式不同，原有的nginx配置方式为通过文件进行访问，内容如下

```
enable-php1.conf enable-php.conf example fastcgi.conf.default fastcgi_params.default k
enable-php7.4.conf enable-php-pathinfo.conf fastcgi.conf fastcgi_params koi-utf m
[root@qilin-v10 conf]# cat enable-php.conf
location ~ [^/]\.php(/|$)
{
    try_files $uri =404;
    fastcgi_pass unix:/tmp/php-cgi.sock;
    fastcgi_index index.php;
    include fastcgi.conf;
}[root@qilin-v10 conf]#
```

ssh:/root@127.0.0.1:57078

而新的php-fpm的访问方式为通过监听端口的方式（可通过查看配置文件，配置文件路径为php7\_4/etc/php-fpm.d/www.conf），具体内容如下

```

; pool name ('www' here)
[www]

; Per pool prefix
; It only applies on the following directives:
; - 'access.log'
; - 'slowlog'
; - 'listen' (unixsocket)
; - 'chroot'
; - 'chdir'
; - 'php_values'
; - 'php_admin_values'
; When not set, the global prefix (or /usr/local/php7_4) applies instead.
; Note: This directive can also be relative to the global prefix.
; Default Value: none
;prefix = /path/to/pools/$pool

; Unix user/group of processes
; Note: The user is mandatory. If the group is not set, the default user's group
;       will be used.
user = nobody
group = nobody

; The address on which to accept FastCGI requests.
; Valid syntaxes are:
;   'ip.add.re.ss:port'   - to listen on a TCP socket to a specific IPv4 address on
;                           a specific port;
;   '[ip:6:addr:ess]:port' - to listen on a TCP socket to a specific IPv6 address on
;                           a specific port;
;   'port'                - to listen on a TCP socket to all addresses
;                           (IPv6 and IPv4-mapped) on a specific port;
;   '/path/to/unix/socket' - to listen on a unix socket.
; Note: this value is mandatory.
listen = 127.0.0.1:9000

; Set listen(2) backlog.
; Default Value: 511 (-1 on FreeBSD and OpenBSD)
;listen.backlog = 511

; Set permissions for unix socket, if one is used. In Linux, read/write
; permissions must be set in order to allow connections from a web server. Many
; BSD-derived systems allow connections regardless of permissions. The owner
; and group can be specified either by name or by their numeric IDs.
; Default Values: user and group are set as the running user
;                  mode is set to 0660
;listen.owner = www-data
;listen.group = www-data
;listen.mode = 0660
; When POSIX Access Control Lists are supported you can set them using
; these options, value is a comma separated list of user/group names.
; When set, listen.owner and listen.group are ignored

```

解决方法：

修改enable-php.conf 文件，修改内容如下：

location ~ [^/].php(/|\$)

```

{
    try_files $uri =404;
    fastcgi_pass 127.0.0.1:9000;
    fastcgi_index index.php;
    include fastcgi.conf;
}

```

在nginx中引用该配置文件(nginx配置文件如下： /usr/local/nginx/conf/nginx.conf)，内容如下：

```

server {
    listen 80;
    listen 443 ssl http2;
    server_name .....qdata.cn;
    index index.php index.html index.htm default.php default.htm default.html;
    root /home/wwwroot/...../public;

    #SSL-START SSL相关配置，请勿删除或修改下一行带注释的404规则
    #error_page 404/404.html;
    ssl_certificate /www/server/panel/vhost/cert/pwxt-admin.qdata.cn/pwxt-admin.qdata.cn_bundle.pem;
    ssl_certificate_key /www/server/panel/vhost/cert/pwxt-admin.qdata.cn/pwxt-admin.qdata.cn.key;
    ssl_protocols TLSv1.1 TLSv1.2 TLSv1.3;
    ssl_ciphers EECDH+CHACHA20:EECDH+CHACHA20-draft:EECDH+AES128:RSA+AES128:EECDH+AES256:RSA+AES256:EECDH+3DES:RSA+3DES:!MD5;
    ssl_prefer_server_ciphers on;
    ssl_session_cache shared:SSL:10m;
    ssl_session_timeout 10m;
    add_header Strict-Transport-Security "max-age=31536000";
    error_page 497 https://$host$request_uri;

    #SSL-END

    #ERROR-PAGE-START 错误页配置，可以注释、删除或修改
    #error_page 404 /404.html;
    #error_page 502 /502.html;
    #ERROR-PAGE-END

    #PHP-INFO-START PHP引用配置，可以注释或修改
    #include enable-php.conf;
    include /usr/local/nginx/conf/enable-php1.conf;
    #include /usr/local/nginx/conf/enable-php7.4.conf;
    #include /usr/local/nginx/conf/enable-php.conf;
    #PHP-INFO-END

    #REWRITE-START URL重写规则引用，修改后将导致面板设置的伪静态规则失效
    #include /www/server/panel/vhost/rewrite/pwxt-admin.yunyouqilu.com.conf;
    #REWRITE-END

    #禁止访问的文件或目录

    location /robot-web/ {
        proxy_pass http://.....:96:8083/;
    }
}

```

2、修改后报错如下：

提示被拒绝，错误信息如下：

```

root@qilin-v10 vhost# tail -10 /www/wwwlogs/pwxt-log
2024/08/30 15:32:42 [crit] 954944#9: *2897 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 182.35....., server: .....cn, request: "GET /spot/mobile/tickets/spot_id=6&path=https://k2f82/pwxt-opera
or.qdata.cn/spot/mobile/tickets/spot_id=6&path=https://k2f82/pwxt-operat
2024/08/30 15:32:42 [crit] 954944#9: *2897 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 1....., server: .....cn, request: "GET /spot/mobile/config/spot_id=6&path=https://k2f82/pwxt-operat
or.qdata.cn/spot/mobile/tickets/spot_id=6&path=https://k2f82/pwxt-operat
2024/08/30 15:32:43 [crit] 954944#9: *2897 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 10.255.7.148, server: .....cn, request: "POST /ota/ota/api HTTP/1.1", upstream: "fastcgi://unix:/tmp/ph
p-cgi.sock", host: ".....qdata.cn"
2024/08/30 15:32:44 [crit] 954944#9: *2897 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 11....., server: .....qdata.cn, request: "GET /spot/mobile/tickets/spot_id=6&path=https://k2f82/pwxt-opera
tor.qdata.cn/spot/mobile/tickets/spot_id=6&path=https://k2f82/pwxt-oper
2024/08/30 15:32:44 [crit] 954944#9: *2897 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 1....., server: .....qdata.cn, request: "GET /spot/mobile/config/spot_id=6&path=https://k2f82/pwxt-oper
or.qdata.cn/spot/mobile/tickets/spot_id=6&path=https://k2f82/pwxt-oper
2024/08/30 15:32:44 [crit] 954944#9: *2897 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 10.255....., server: .....cn, request: "POST /ota/ota/api HTTP/1.1", upstream: "fastcgi://unix:/tmp/ph
p-cgi.sock", host: ".....qdata.cn"
2024/08/30 15:32:46 [crit] 954944#9: *2897 connect() to unix:/tmp/php-cgi.sock failed (2: No such file or directory) while connecting to upstream, client: 43.1....., server: .....cn, request: "GET /spot/wechat/callback/token=8&code=001sp000530351r294001
804xsp04&state=0&path=https://k2f82/pwxt-operat
2024/08/30 15:38:00 [error] 138363#138: *14 connect() to unix:/tmp/php-cgi.sock failed (111: Connection refused) while connecting to upstream, client: 124.12....., server: .....cn, request: "GET /system/images/oa.php HTTP/2.0", upstream: "fastcgi://unix:/tmp
php-cgi.sock", host: ".....qdata.cn"
2024/08/30 15:38:11 [error] 138363#138: *14 connect() to unix:/tmp/php-cgi.sock failed (111: Connection refused) while connecting to upstream, client: 124.12....., server: .....cn, request: "GET /system/images/oa.php HTTP/2.0", upstream: "fastcgi://unix:/tmp
php-cgi.sock", host: ".....qdata.cn"
2024/08/30 15:38:16 [error] 138363#138: *14 connect() to unix:/tmp/php-cgi.sock failed (111: Connection refused) while connecting to upstream, client: 124.1....., server: .....cn, request: "GET /admin/login/verify.html"
root@qilin-v10 vhost# 每输入一行时，自动换行
Connection closing..Socket close.
Connection closed by foreign host.

```

通过排查发现少修改了vhost下的enable-php，修改后即可成功

```

server
{
    listen 80;
        listen 443 ssl http2;
        server_name .....cn;
    index index.php index.html index.htm default.php default.htm default.html;
    root /home/wwwroot/.....cn/public;

    #SSL-START SSL相关配置，请勿删除或修改下一行带注释的404规则
    #error_page 404/404.html;
    ssl_certificate      /www/server/.....cn_bundle.pem;
    ssl_certificate_key  /www/server/.....cn.key;
    ssl_protocols TLSv1.1 TLSv1.2 TLSv1.3;
    ssl_ciphers EECDH+CHACHA20:EECDH+CHACHA20-draft:EECDH+AES128:RSA+AES128:EECDH+AES256:RSA+AES256:EECDH+3DES:RSA+3DES;
    ssl_prefer_server_ciphers on;
    ssl_session_cache shared:SSL:10m;
    ssl_session_timeout 10m;
    add_header Strict-Transport-Security "max-age=31536000";
    error_page 497 https://$host$request_uri;

    #SSL-END

    #ERROR-PAGE-START 错误页配置，可以注释、删除或修改
    #error_page 404 /404.html;
    #error_page 502 /502.html;
    #ERROR-PAGE-END

    #PHP-INFO-START PHP引用配置，可以注释或修改
    #include enable-php.conf;
    include /usr/local/nginx/conf/enable-php1.conf;
    #include /usr/local/nginx/conf/enable-php7.4.conf;
    #include /usr/local/nginx/conf/enable-php.conf;
    #PHP-INFO-END

    #REWRITE-START URL重写规则引用，修改后将导致面板设置的伪静态规则失效
    #include /www/server/panel/vhost/rewrite/.....m.conf;
    #REWRITE-END

    #禁止访问的文件或目录

    location /robot-web/ {
        proxy_pass http://192.1.....:8083/;
    }

    location ~ ^/(.user.ini|.htaccess|.git|.env|.svn|.project|LICENSE|README.md)
    {

```

3、从小程序跳转到h5的时候，系统总是报错，报错信息如下



通过查看报错信息是openssl的问题，查看相关资料发现需要在php.ini文件中配置openssl.cafile的路径，加入如下配置即可解决该问题

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

备注：

手动启动php-fpm: ./php-fpm -c /usr/local/php7\_4/lib/php.ini -y /usr/local/php7\_4/etc/php-fpm.conf

当存在多版本php时，通过软连接进行版本切换: ln -sf /usr/local/php7\_4/bin/php /usr/bin/php

断开所有php-fpm进程连接: pkill -9 php-fpm

重启php-fpm:

systemctl stop php-fpm

systemctl start php-fpm

