# Linux 下安装 apache+PHP 环境

安装环境：CentOS-7.6

Apache 的相关软件包下载地址：
http://httpd.apache.org/download.cgi#apache24

## <u>我这里使用的相关软件：</u>

1 Apache HTTP Server：
http://mirrors.tuna.tsinghua.edu.cn/apache//httpd/httpd-2.4.39.tar.gz

2 Apr 和 Apr-Util：
http://mirror.bit.edu.cn/apache//apr/apr-1.6.5.tar.gz
http://mirror.bit.edu.cn/apache//apr/apr-util-1.6.1.tar.gz

3 Pcre：
https://ftp.pcre.org/pub/pcre/pcre-8.32.tar.gz

<u>4 PHP:</u>
http://cn.php.net/distributions/php-7.2.19.tar.gz

## 安装相关依赖包：

安装 gcc：
`yum install -y gcc-c++`
安装依赖包 expat-devel、zlib-devel、openssl-devel
`yum install -y expat-devel zlib-devel openssl-devel`

安装 apr：
```
tar -zxvf apr-1.6.5.tar.gz
cd apr-1.6.5
./configure --prefix=/usr/local/apr
make && make install
```
<span style="color:red">编译过程报错：rm: cannot remove 'libtoolT': No such file or directory</span>
<span style="color:red">编辑配置文件，在配置文件中找到 RM='$RM'这一行　修改为 RM='$RM -f'，修改完成</span>
安装 apr-util：
```
tar -zxvf apr-util-1.6.1.tar.gz
cd apr-util-1.6.1
./configure --prefix=/usr/local/apr-util --with-apr=/usr/local/apr
make && make install
```

安装依赖包 pcre
```
tar zxvf pcre-8.32.tar.gz
cd pcre-8.32
```

```
./configure --prefix=/usr/local/pcre
make && make install
```

解压 Apache 安装包：
```
tar zxvf httpd-2.4.39.tar.gz
cd httpd-2.4.39
./configure --prefix=/usr/local/server/apache \
--with-apr=/usr/local/apr \
--with-apr-util=/usr/local/apr-util \
--with-pcre=/usr/local/pcre \
--with-mysql=shared,mysqlnd \
--enable-so \
--enable-ssl \
--enable-deflate \
--enable-rewrite \
--enable-headers \
--enable-expires \
--disable-cgid \
--disable-cgi
make && make install
```

修改配置文件 httpd.conf：
```
vim /usr/local/server/apache/conf/httpd.conf
```
找到如下图 去掉#注释，修改为 ServerName localhost:80 ,可以找到 Listen
修改端口





## 将 httpd 加入系统服务并设置开机自启：
1 将 httpd 加入系统服务
```
cp /usr/local/server/apache/bin/apachectl /etc/init.d/httpd
```
2 修改/etc/init.d/httpd
```
vim /etc/init.d/httpd
```
在第 3 行加入以下内容

```
# chkconfig: 345 85 15

# description: Activates/Deactivates Apache Web Server
```
(ps：'#'不可去掉)

如需设置系统服务开机自启（我这里就不设置了）

```
systemctl enable httpd
```


启动 Apache 服务：

```
service httpd start
```

重启：

```
service httpd restart
```

停止：

```
service httpd stop
```


## 安装 PHP

安装依赖包(为了安装过程的顺利)：

```
yum -y install wget vim pcre pcre-devel openssl openssl-devel \
libicu-devel gcc gcc-c++ autoconf libjpeg libjpeg-devel libpng \
libpng-devel freetype freetype-devel libxml2 libxml2-devel zlib \
zlib-devel glibc glibc-devel glib2 glib2-devel ncurses ncurses-devel \
curl curl-devel krb5-devel libidn libidn-devel openldap openldap-deve
l \
nss_ldap jemalloc-devel cmake boost-devel bison automake libevent \
libevent-devel gd gd-devel libtool* libmcrypt libmcrypt-devel mcrypt \
mhash libxslt libxslt-devel readline readline-devel gmp gmp-devel \
libcurl libcurl-devel openjpeg-devel libcurl.x86_64 libcurl-devel.x86
_64 \
libjpeg-turbo libjpeg-turbo-devel libpng freetype  libpng-devel \
freetype-devel icu libicu libicu-devel  openldap openldap-clients \
openldap-devel openldap-servers
```


```
cp -frp /usr/lib64/libldap* /usr/lib/
```

解压 PHP 压缩包

```
tar zxvf php-7.2.19.tar.gz
cd php-7.2.19
```

编译安装

```
./configure --prefix=/usr/local/server/php \
--with-apxs2=/usr/local/server/apache/bin/apxs \
```

```
--with-config-file-path=/usr/local/server/php \
--enable-fpm \
--with-fpm-user=www \
--with-fpm-group=www \
--enable-mysqlnd \
--with-mysqli=mysqlnd \
--with-pdo-mysql=mysqlnd \
--enable-mysqlnd-compression-support \
--with-iconv-dir \
--with-freetype-dir \
--with-jpeg-dir \
--with-png-dir \
--with-zlib \
--with-libxml-dir \
--enable-xml \
--disable-rpath \
--enable-bcmath \
--enable-shmop \
--enable-sysvsem \
--enable-inline-optimization \
--with-curl \
--enable-mbregex \
--enable-mbstring \
--enable-intl \
--with-libmbfl \
--enable-ftp \
--with-gd \
--with-openssl \
--with-mhash \
--enable-pcntl \
--enable-sockets \
--with-xmlrpc \
--enable-zip \
--enable-soap \
--with-gettext \
--disable-fileinfo \
--enable-opcache \
--with-pear \
--enable-maintainer-zts \
--with-ldap=shared \
--without-gdbm
make && make install
```

（如果上面步骤出现错误可以尝试再试一次）

配置 php.ini：

将配置文件拷贝到 PHP 安装目录

```
cp php.ini-* /usr/local/server/php/
```

生成 php.ini

```
cp php.ini-development /usr/local/server/php/php.ini
cp /usr/local/server/php/etc/php-fpm.conf.default /usr/local/server/php/etc/php-fpm.conf
```

修改 php.ini 配置文件：

```
vi /usr/local/server/php/php.ini
```

可以参考如下配置：

```
expose_php = Off
```

```
short_open_tag = ON
```

```
max_execution_time = 300
```

```
max_input_time = 300
```

```
memory_limit = 128M
```

```
post_max_size = 32M
```

```
date.timezone = Asia/Shanghai
```

```
extension_dir = "/usr/local/server/php/lib/php/extensions/no-debug-zts-20170718/"
```

修改 httpd.conf：

```
vi /usr/local/server/apache/conf/httpd.conf
```

载入 PHP 模块，如 httpd.conf 中有下列代码则直接去掉前面#即可，没有则加入（注意：这里如果有了请不要重复加入）

```
LoadModule php7_module modules/libphp7.so
```

在底部加入以下代码使得 Apache 可以解析 php 文件：

```
<IfModule mod_php7.c>
```

```
AddType application/x-httpd-php .php
```

```
</IfModule>
```

找到如下代码，在 index.html 后面加入 index.php（设置欢迎页面，该步骤可省略）

```
<IfModule dir_module>
DirectoryIndex index.html
</IfModule>
```

重启 Apache

```
service httpd restart
```

测试 PHP 是否成功安装

创建/usr/local/server/apache/htdocs/index.php

```
vim /usr/local/server/apache/htdocs/index.php
```

在 index.php 中编写以下代码

```
<?php
phpinfo();
?>
```

然后访问试一下！

http://x.x.x.x/index.php