部署文档

一键部署方案:

该方案适用于CentOS₇,且在CentOS₇.7下进行了测试。整体过程在注释中有所说明,且基于"问题解决"部分。

环境搭建

该部署脚本可以在一台干净的服务器上安装所需的LAMP环境,克隆Yii2仓库并完成相关配置。

```
# custon output color
function INFO() {
        echo -e "\e[$1;49;1m> $2 \033[39;49;0m"
        # if have $3 parameter, it stands for sheep time
        if [ -n "$3" ]; then
                sleep $3
        fi
        echo ""
}
function check_mysql() {
        rpm -qa | grep mysql-community-server &>/dev/null
        if [ $? -eq 0 ]; then
                return 0
        else
                return 1
        fi
}
#非root用户不能执行该脚本
if [ "$UID" != 0 ]; then
        echo " "
```

```
INFO 35 "Must be root ro run this script."
        exit 1
fi
INFO 94 "Start to install Apache server."
# check_install httpd httpd-manual mod_ssl mod_perl httpd-devel
yum -y install httpd httpd-manual mod_ssl mod_perl httpd-devel
# test Apache server
systemctl start httpd.service
INFO 32 "Apache server is installed and started."
# install MySQL server
if check_mysql; then
        INFO 32 "MySQL server has already been installed."
else
        INFO 94 "Start to install MySQL8 server."
        curl -sSLO https://dev.mysql.com/get/mysql80-community-
release-el7-7.noarch.rpm
        rpm -ivh mysql80-community-release-el7-7.noarch.rpm
        yum -y install mysql-server
        # start MySQL server
        systemctl start mysqld
        # change the default password
        default_password=$(grep 'temporary password'
/var/log/mysqld.log | awk -F ' ' '{print $NF}')
        echo $default_password
        INFO 94 "Please input the new password for MySQL server."
        INFO 94 "Your password must be at least 8 characters long,
contain at least one uppercase letter, one lowercase letter, one
number, and one special character."
        read -s -p "New password: " new_password
        INFO 94 "Please input the new password again."
        read -s -p "New password: " new_password2
        if [ "$new_password" != "$new_password2" ]; then
                INFO 35 "The two passwords you entered do not
match."
                exit 1
        fi
```

```
mysql -uroot -p$default_password --connect-expired-
password <<EOF
ALTER USER 'root'@'localhost' IDENTIFIED BY '$new_password';
use mysql;
update user set host='%' where user='root';
flush privileges;
ALTER USER 'root'@'%' IDENTIFIED WITH mysql_native_password BY
'$new_password';
flush privileges;
E0F
        INFO 32 "MySQL server is installed and started."
fi
# install PHP
INFO 94 "Start to install PHP7.4."
sleep 5
yum -y install http://dl.fedoraproject.org/pub/epel/epel-release-
latest-7.noarch.rpm
yum -y install http://rpms.remirepo.net/enterprise/remi-release-
7.rpm
yum -y install yum-utils
yum-config-manager --disable 'remi-php*'
yum-config-manager --enable remi-php74
yum -y update
yum -y --enablerepo=remi install php74-php php74-php-qd php74-
php-xml php74-php-sockets php74-php-session php74-php-snmp php74-
php-mysql
ln -s /opt/remi/php74/root/usr/bin/php /usr/bin/php
systemctl restart php74-php-fpm
systemctl enable php74-php-fpm
# update proxy
cat > /etc/httpd/conf.modules.d/10-php74-fpm.conf << EOF</pre>
<FilesMatch \.php$>
  SetHandler "proxy:fcqi://127.0.0.1:9000"
</FilesMatch>
E0F
# test PHP
```

```
echo "<?php phpinfo(); ?>" >/var/www/html/phpinfo.php
systemctl start php-fpm
systemctl restart httpd
INFO 32 "PHP is installed."
# get the yii2 repo
yum -y install git
git config --global http.sslVerify false
git config --global user.name "Lunaticsky-tql"
git config --global user.email "2013599@mail.nankai.edu.cn"
git clone -b server
https://github.com/Metreacs/Internet_database_develepment_R-
U_War.git /var/www/html/Internet_database_develepment_R-U_War
# install composer
# curl -sS https://getcomposer.org/installer | php
# mv composer.phar /usr/local/bin/composer
# install uzip tools
yum -y install unzip
# change the composer source
# composer config -g repo.packagist composer
https://mirrors.aliyun.com/composer/
# run install.sh in yii_advanced_origin to install yii2
chmod +x /var/www/html/Internet_database_develepment_R-
U_War/bootstramp.sh
source /var/www/html/Internet_database_develepment_R-
U_War/bootstramp.sh
```

bootstramp.sh 在项目文件下,通过 source 访问可以在同一个进程中运行。 bootstramp.sh 的主要功能是初始化数据库和爬虫环境。

```
# Team:你说的都队,NKU
# coding by 田佳业 2013599
# 一键部署脚本
function INFO() {
    echo -e "\e[$1;49;1m> $2 \033[39;49;0m"
```

```
# if have $3 parameter, it stands for sheep time
        if [ -n "$3" ]; then
                sleep $3
        fi
        echo ""
}
php /var/www/html/Internet_database_develepment_R-U_War/init --
env=Development --overwrite=All --delete=All
password="Yii#123456"
# run composer install
# composer config -g repo.packagist composer
https://mirrors.aliyun.com/composer/
# composer install --ignore-platform-req=php
(
cat << EOF
<?php
return [
    'components' => [
        'db' => [
            'class' => 'yii\db\Connectio~n',
            'dsn' => 'mysql:host=localhost;dbname=yii22022',
            'username' => 'root',
            'password' => '${password}',
            'charset' => 'utf8mb4',
        ],
        'mailer' => [
            'class' => 'yii\swiftmailer\Mailer',
            'viewPath' => '@common/mail',
        ],~
    ],
];
E0F
) > /var/www/html/Internet_database_develepment_R-
U_War/common/config/main-local.php
# create database yii22022
mysql -uroot -p${password} --connect-expired-password << EOF</pre>
```

```
create database yii22022;
EOF
# run ./data/init.sql
mysql -uroot -p${password} --connect-expired-password yii22022 <
/var/www/html/Internet_database_develepment_R-
U_War/data/yii22022.sql
pip3 install bs4
pip3 install pymysql
python3 /var/www/html/Internet_database_develepment_R-
U_War/spider/spiderForBlog.py</pre>
```

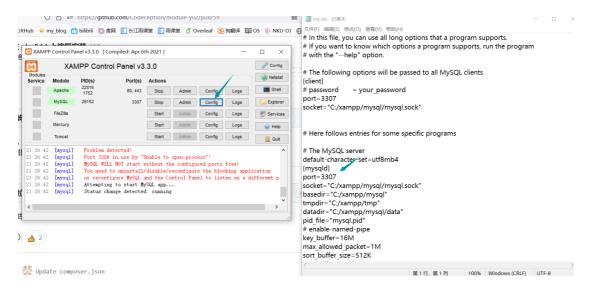
通过在首页运行第一个脚本,即可完成整个环境的部署。

问题解决

下面列出了在开发和部署过程中踩过的若干坑以及解决方案。

原来电脑上装过MySQL,由于MySQL端口占用和xampp的冲突

修改SQL端口号即可,也可不修改,在yii2中使用3306端口。修改了主要是可以用phpmyadmin。不修改的话也可以用原来装的MySQL,用Navicat管理也可以。



如果改了使用phpmyadmin也要改端口号:

phpadmin拒绝访问解决:

Add these lines to the file xampp/phpMyAdmin/config.inc.php:

```
$cfg['Servers'][$i]['port'] = '3307';
```

yii2 config/db.php 也需要修改。

```
return [
    'class' => 'yii\db\Connection',
    'dsn' => 'mysql:host=localhost:3307;dbname=yii2basic',
    'username' => 'root',
    'password' => 'tjy666888tt',
    'charset' => 'utf8',

    // Schema cache options (for production environment)
    //'enableSchemaCache' => true,
    //'schemaCacheDuration' => 60,
    //'schemaCache' => 'cache',

];
```

composer php版本报错

```
Loading composer repositories with package information
Updating dependencies
Your requirements could not be resolved to an installable set of packages.

Problem 1
- codeception/module-yii2[1.0.0, ..., 1.1.1] require php >=5.6.0 <8.0 -> your php version (8.2.0)
) does not satisfy that requirement.
- codeception/module-yii2[1.1.2, ..., 1.1.3] require php >=5.6.0 <8.1 -> your php version (8.2.0)
) does not satisfy that requirement.
- codeception/module-yii2 1.1.4 requires php >=5.6.0 <=8.1 -> your php version (8.2.0) does not satisfy that requirement.
- codeception/module-yii2 1.1.5 requires php >=5.6.0 <=8.1 | ~8.1.0 -> your php version (8.2.0)

does not satisfy that requirement.
```

```
composer install --ignore-platform-req=php
```

Navicat连接SQLite

文件-新建连接-SQLite

5.yiii2 运行更换端口号

php yii serve -p 8081 或 php yii serve --port=8081

• • • •

Server started on http://localhost:8081/

更新phpmyadmin

2月8号phpmyadmin发布了5.2.1版本,可以去官网下载,改名为 phpMyAdmin 放到 xampp安装目录,在删掉原来的 phpMyAdmin 之前把原来的 config.inc.php 拷贝 到新版本的文件夹中。

注,后期发现xampp自带的mysql版本太低,已经放弃使用。

服务器端问题

Apache配置路由

查看Apache 配置文件:

vim /etc/httpd/conf/httpd.conf

centos安装php7

```
rpm -Uvh https://mirror.webtatic.com/yum/el7/epel-release.rpm
rpm -Uvh https://mirror.webtatic.com/yum/el7/webtatic-release.rpm
yum -y install php70w-tidy php70w-common php70w-devel php70w-pdo
php70w-mysql php70w-gd php70w-ldap php70w-mbstring php70w-mcrypt
php70w-fpm
```

测试 phpinfo 时发现网站只显示源代码,解决方案:

```
vim /etc/httpd/conf.modules.d/10-php-fpm.conf
#然后将下面内容粘贴进去
<FilesMatch \.php$>
SetHandler "proxy:fcgi://127.0.0.1:9000"
</FilesMatch>
```

centos 升级php到7.4

yii2的 composer.json 中写明php依赖版本需要大于7.4。一开始尝试直接修改为7.0,但是运行之后报此错误:

```
Parse error: syntax error, unexpected '?', expecting variable (T_VARIABLE) in [closed]
```

查阅Stack Overflow后发现php版本还是太低。因此尝试安装php7.4

这篇博客说明的很明了。但是还是存在一些问题。下给出自己发现总结的可行方法:

操作步骤:

1.安装 EPEL 源:

EPEL (Extra Packages for Enterprise Linux)是基于Fedora的一个项目,为"红帽系"的操作系统提供额外的软件包,适用于RHEL、CentOS和Scientific Linux

```
yum install http://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm
```

2.安装 Remi 源:

CentOS下除了EPEL源之外还有REMI的源,REMI源保证了软件的最新但并不一定是稳定的。因此安装了REMI源之后默认是不启用的,只有需要的时候才会开启使用。

yum install http://rpms.remirepo.net/enterprise/remi-release-7.rpm

3. 安装 yum-utils (yum-config-manager):

```
yum install yum-utils
```

4.配置源: 首先禁用当前的php源并启用需要安装的php7.4的源

```
yum-config-manager --disable 'remi-php*'
yum-config-manager --enable remi-php74
```

5.执行Update更新PHP7.4:

```
yum update
```

Update命令之后,自动开始下载,安装,清理,启用,下载量较大。

安装PHP

```
yum --enablerepo=remi install php74-php
```

安装所需要php扩展模块

yum --enablerepo=remi install php74-php php74-php-gd php74-php-xml php74-php-sockets php74-php-session php74-php-snmp php74-php-mysql

6.链接到php文件

这时候运行 php74 -v 可以看到提示。我们希望将其链接到 php-v 上。

可以尝试进行链接

ln -s /opt/remi/php74/root/usr/bin/php /usr/bin/php

7.下载php74-php-fpm

尝试 systemctl restart php74-php-fpm 仍旧提示 Failed to restart php74-php-fpm.service: Unit not found.

查看 /usr/local/php74/sbin/php-fpm 发现什么也没有。也就是刚才并没有把 php-fpm 下载下来。需要再执行

```
yum --enablerepo=remi install php74-php-fpm
```

同样的进行链接:

```
ln -s /usr/local/php74/sbin/php-fpm /usr/sbin/php74-fpm
```

8.启动php7.4并设置开机自启动

```
#重启php-fpm
systemctl restart php74-php-fpm
#添加自动启动
systemctl enable php74-php-fpm
```

大功告成。

同时还要配置web可访问。conf名字要和fpm对应起来。

```
vim /etc/httpd/conf.modules.d/10-php74-fpm.conf
#然后将下面内容粘贴进去
<FilesMatch \.php$>
SetHandler "proxy:fcgi://127.0.0.1:9000"
</FilesMatch>
```

配置mysql 远程访问

登录mysql,输入:

```
GRANT ALL PRIVILEGES ON *.* TO 'root'@'%' IDENTIFIED BY
'password';
```

```
FLUSH PRIVILEGES
```

重启mysql。最后别忘了更新云服务器上的安全组,放行3306(mysql)端口。

Centos安装mysql8

在浏览器中访问官网:

yum自带的mysql为5.x版本,很多功能有所欠缺,故需升级到mysql8。主要参考
1.安装 MySQL

如介绍中所述,安装 MySQL 的 Yum 命令实际上安装了 MariaDB。 要安装 MySQL,我们需要访问 MySQL 社区 Yum Repository ,它提供了 MySQL 的包。

Red Hat Enterprise Linux 9 / Oracle Linux 9 (Architecture Independent), RPM Package (mysql80-community-release-el9-1.noarch.rpm)	10.3K Download MD5: d07a0c6a95783c43d0c520c245cf18e0
Red Hat Enterprise Linux 8 / Oracle Linux 8 (Architecture Independent), RPM Package (mysql80-community-release-el8-4-noarch.rpm)	14.1K Download MD5: 72a4647a99c7ac1e3a8efb874b1d4af4
Red Hat Enterprise Linux 7 / Oracle Linux 7 // Architecture Independent), RPM Package	10.9K Download
(mysql80-community-release-el7-7.noarch.rpm) Red Hat Enterprise Linux 6 / Oracle Linux 6 (Architecture	MD5: 659400f9842fffb8d64ae0b650f081b9

curl -sSLO https://dev.mysql.com/get/mysql80-community-releaseel7-7.noarch.rpm

校验 md5sum

md5sum mysql80-community-release-el7-7.noarch.rpm 659400f9842fffb8d64ae0b650f081b9 mysql80-community-release-el7-7.noarch.rpm

添加yum 存储库

sudo rpm -ivh mysql80-community-release-el7-7.noarch.rpm

安装 MySQL 服务器:

sudo yum install mysql-server

2.启动 MySQL

```
sudo systemctl start mysqld
```

```
sudo systemctl status mysqld
```

如果 MySQL 已成功启动,输出应包含 Active: active (running) 最后一行应该类似于:

```
Dec 01 19:02:20 centos-512mb-sfo2-02 systemd[1]: Started MySQL Server.
```

在安装过程中,会为 MySQL root 用户生成一个临时密码。 找到它在 mysqld.log 使用此命令:

```
sudo grep 'temporary password' /var/log/mysqld.log
Output2022-01-24T19:54:46.313728Z 6 [Note] [MY-010454] [Server] A
temporary password is generated for root@localhost: mqRfBU_3Xk>r
```

3.配置MySQL

配置远程访问并修改密码:

8.o修改密码的方式与5.o有所不同。

```
mysql> use mysql
# 先配置远程访问
mysql> update user set host='%' where user='root';
# 设置密码强度
mysql> SET GLOBAL validate_password.policy=LOW;
# 若上句话报错, 尝试
mysql> set global validate_password_policy=0;
mysql> ALTER USER 'root'@'%' IDENTIFIED WITH mysql_native_password
BY 'your_password';
```

高级模板下运行php yii serve报错

Document root "/var/www/html/highwaymotels/console/web" does not exist.

需要改为:

```
php yii serve --docroot="frontend/web/"
```

apache-httpd设置访问目录后进入的默认页面为index.php

找到apache配置。

```
vim /etc/httpd/conf/httpd.conf
```

可以看到默认只解析 index.html。在后面添加上 index.php 即可。

```
#
# DirectoryIndex: sets the file that Apache will serve if a directory
# is requested.
#
<IfModule dir_module>
    DirectoryIndex index.html
</IfModule>
```

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

####

```
sudo rpm -e --nodeps mysql-community-common-5.7.41-1.el7.x86_64
mysql57-community-release-el7-10.noarch mysql-community-libs-
5.7.41-1.el7.x86_64 mysql-community-client-5.7.41-1.el7.x86_64
mysql-community-server-5.7.41-1.el7.x86_64
```

```
sudo yum-config-manager --disable mysql57-community
```

```
sudo yum-config-manager --enable mysql80-community
```

alter user 'root'@'localhost' identified by 'Root@123456';

```
SET PASSWORD = PASSWORD('Yii2123456');
 ALTER USER 'root'@'%' IDENTIFIED WITH mysql_native_password BY
 'Yii2123456';
grant all privileges on . to root@'%' identified by 'Yii#123456' with grant option;
 ALTER USER 'root'@'localhost' IDENTIFIED WITH
 mysql_native_password BY 'Yii#123456';
/var/www/html/Internet_database_development_R-U_War
systemctl restart httpd.service
 # 设置文档根目录为 "basic/web"
 DocumentRoot "path/to/basic/web"
 <Directory "path/to/basic/web">
     # 开启 mod_rewrite 用于美化 URL 功能的支持(译注: 对应 pretty URL 选
 项)
     RewriteEngine on
     # 如果请求的是真实存在的文件或目录,直接访问
     RewriteCond %{REQUEST_FILENAME} !-f
     RewriteCond %{REQUEST_FILENAME} !-d
     # 如果请求的不是真实文件或目录,分发请求至 index.php
     RewriteRule . index.php
     # if $showScriptName is false in UrlManager, do not allow
 accessing URLs with script name
     RewriteRule ^index.php/ - [L,R=404]
     # ...其它设置...
```

</Directory>

```
ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY '';
```

加速github下载

github增强油猴

```
IndexIgnore */*
RewriteEngine on

# if a directory or a file exists, use it directly
RewriteCond %{REQUEST_FILENAME} !-f
RewriteCond %{REQUEST_FILENAME} !-d

# otherwise forward it to index.php
RewriteRule . index.php
```