

1750562 - 张博-1341155235@qq.com

搭建LAMP环境

简介

流程

安装apache  
安装php  
将php和apache整合  
安装MySQL  
整合MySQL和php  
MySQL密码设置:  
测试  
部署wordpress服务:

1750562 - 张博-[1341155235@qq.com](mailto:1341155235@qq.com)

## 搭建LAMP环境

### 简介

lamp环境 (web组合应用)

LAMP是指一组通常一起使用来运行动态网站或者服务器的[自由软件](#)名称首字母缩写:

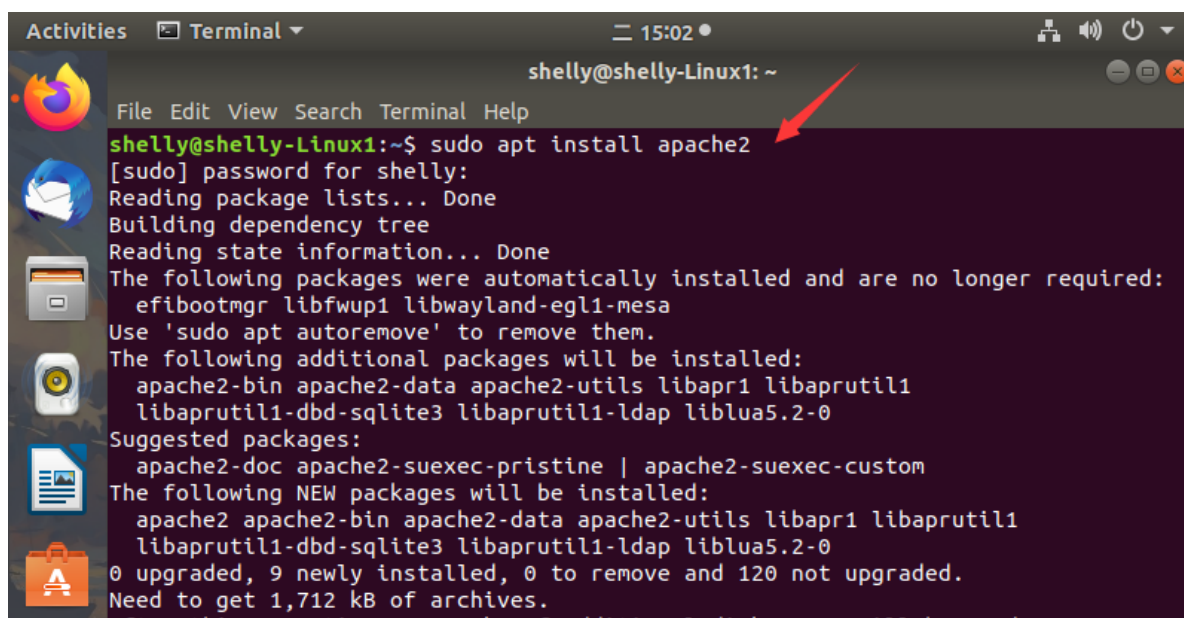
- [Linux](#), [操作系统](#)
- [Apache](#), 网页服务器
- [MariaDB](#)或[MySQL](#), [数据库管理系统](#) (或者[数据库服务器](#))
- [PHP](#)、[Perl](#)或[Python](#), [脚本语言](#)

### 流程

本文打算在ubuntu系统进行搭建, 选择Ubuntu版本为18.04

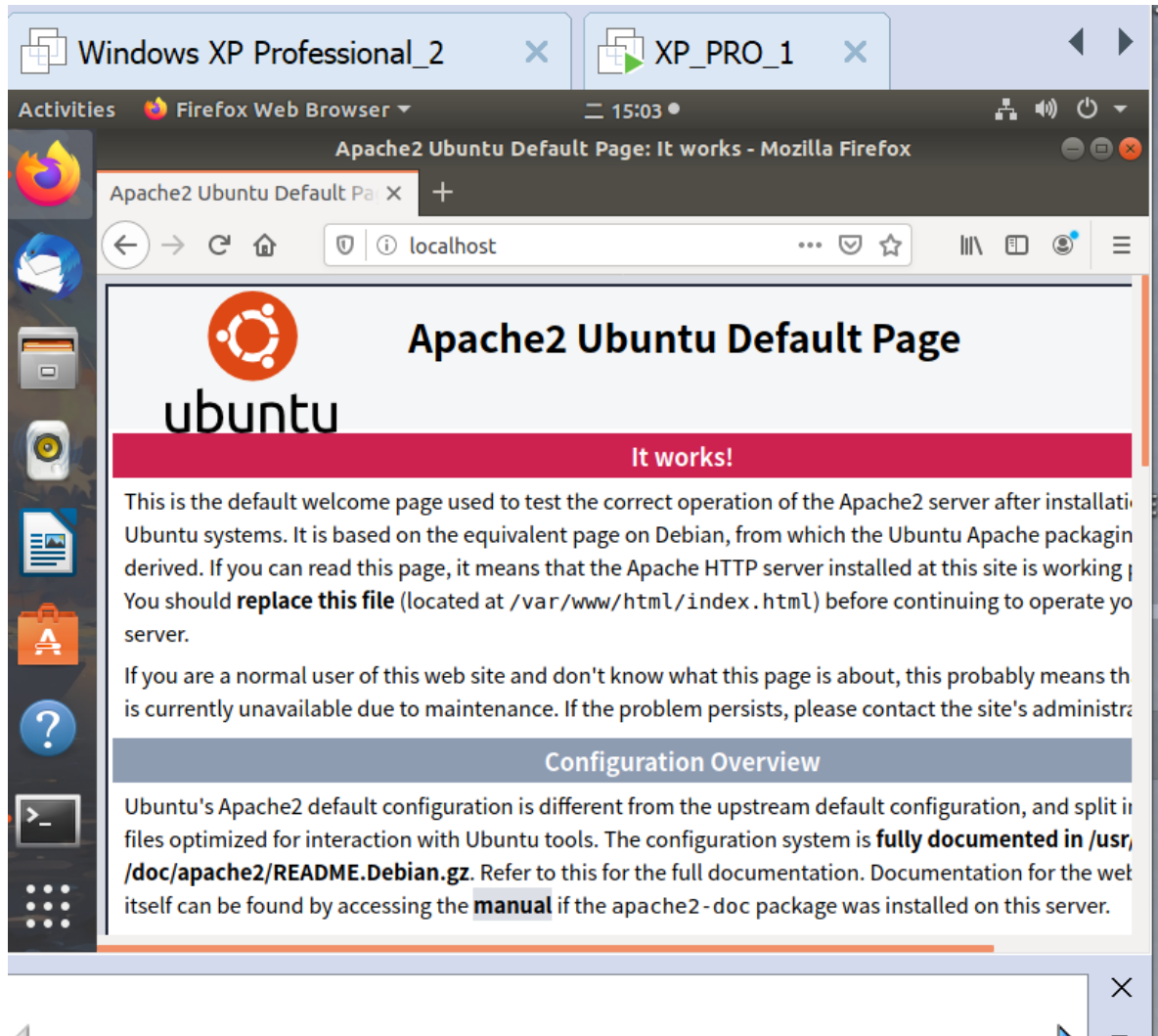
### 安装apache

安装apache

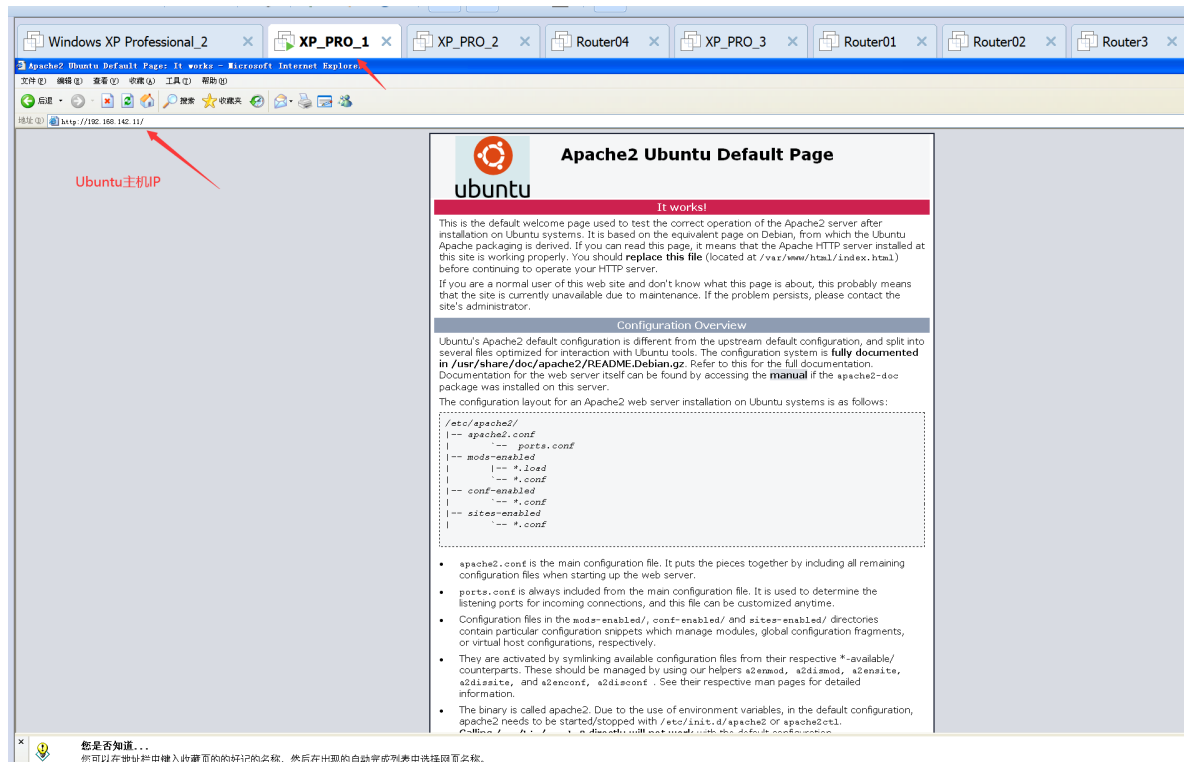


```
Activities  Terminal  15:02
shelly@shelly-Linux1: ~
File Edit View Search Terminal Help
shelly@shelly-Linux1:~$ sudo apt install apache2
[sudo] password for shelly:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  efibootmgr libfwup1 libwayland-egl1-mesa
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap liblua5.2-0
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap liblua5.2-0
0 upgraded, 9 newly installed, 0 to remove and 120 not upgraded.
Need to get 1,712 kB of archives.
```

本地测试：



同网段其余主机测试：



安装php

```
shelly@shelly-Linux1:~$ sudo apt install php7.0
Reading package lists... Done
Building dependency tree
Reading state information... Done
Note, selecting 'php7.0-remctl' for regex 'php7.0'
Note, selecting 'php7.0-common' for regex 'php7.0'
Note, selecting 'php-remctl' instead of 'php7.0-remctl'
The following packages were automatically installed and are no longer required:
  efibootmgr libfwup1 libwayland-egl1-mesa
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  fonts-lato javascript-common libjs-jquery libremctl1 libruby2.5 php-common
  php7.2-cli php7.2-common php7.2-json php7.2-opcache php7.2-phpdbg
  php7.2-readline rake ruby ruby-did-you-mean ruby-minitest ruby-net-telnet
  ruby-power-assert ruby-test-unit ruby2.5 rubygems-integration
Suggested packages:
  php-pear ri ruby-dev bundler
The following NEW packages will be installed:
  fonts-lato javascript-common libjs-jquery libremctl1 libruby2.5 php-common
  php-remctl php7.2-cli php7.2-common php7.2-json php7.2-opcache
  php7.2-phpdbg php7.2-readline rake ruby ruby-did-you-mean ruby-minitest
  ruby-net-telnet ruby-power-assert ruby-test-unit ruby2.5
  rubygems-integration
0 upgraded, 22 newly installed, 0 to remove and 120 not upgraded.
Need to get 10.2 MB of archives.
After this operation, 45.4 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://mirrors.aliyun.com/ubuntu bionic/main amd64 fonts-lato all 2.0-2 [2,698 kB]
Get:2 http://mirrors.aliyun.com/ubuntu bionic/main amd64 javascript-common all 11 [6,066 B]
Get:3 http://mirrors.aliyun.com/ubuntu bionic/main amd64 libjs-jquery all 3.2.1-1 [152 kB]
Get:4 http://mirrors.aliyun.com/ubuntu bionic/main amd64 rubygems-integration all 1.11 [4,994 B]
Get:5 http://mirrors.aliyun.com/ubuntu bionic-security/main amd64 rake all 12.3.1-1ubuntu0.1 [44.9 kB]
Get:6 http://mirrors.aliyun.com/ubuntu bionic/main amd64 ruby-did-you-mean all 1.2.0-2 [9,700 B]
Get:7 http://mirrors.aliyun.com/ubuntu bionic/main amd64 ruby-minitest all 5.10.3-1 [38.6 kB]
Get:8 http://mirrors.aliyun.com/ubuntu bionic/main amd64 ruby-net-telnet all 0.1.1-2 [12.6 kB]
Get:9 http://mirrors.aliyun.com/ubuntu bionic/main amd64 ruby-power-assert all 0.3.0-1 [7,952 B]
Get:10 http://mirrors.aliyun.com/ubuntu bionic/main amd64 ruby-test-unit all 3.2.5-1 [61.1 kB]
```

安装php版本为7.2

```
shelly@shelly-Linux1:~$ php7.2 -v
PHP 7.2.24-0ubuntu0.18.04.6 (cli) (built: May 26 2020 13:09:11) ( NTS )
Copyright (c) 1997-2018 The PHP Group
Zend Engine v3.2.0, Copyright (c) 1998-2018 Zend Technologies
    with Zend OPcache v7.2.24-0ubuntu0.18.04.6, Copyright (c) 1999-2018, by Zend Technologies
shelly@shelly-Linux1:~$ a
```

## 将php和apache整合

```
shelly@shelly-Linux1:~$ sudo apt install libapache2-mod-php7.2
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  efibootmgr libfwup1 libwayland-egl1-mesa
Use 'sudo apt autoremove' to remove them.
Suggested packages:
  php-pear
The following NEW packages will be installed:
  libapache2-mod-php7.2
0 upgraded, 1 newly installed, 0 to remove and 120 not upgraded.
Need to get 1,350 kB of archives.
After this operation, 4,793 kB of additional disk space will be used.
Get:1 http://mirrors.aliyun.com/ubuntu bionic-security/main amd64 libapache2-mod-php7.2 amd64 7.2.24-0ubuntu0.18.04.6 [1,350 kB]
Fetched 1,350 kB in 5s (277 kB/s)
Selecting previously unselected package libapache2-mod-php7.2.
```

## 安装MySQL

```
shelly@shelly-Linux1: ~  
File Edit View Search Terminal Help  
Module mpm_event disabled.  
Enabling module mpm_prefork.  
apache2_switch_mpm Switch to prefork  
apache2_invoke: Enable module php7.2  
shelly@shelly-Linux1:~$ sudo apt install mysql-server  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  efibootmgr libfwup1 libwayland-egl1-mesa  
Use 'sudo apt autoremove' to remove them.  
The following additional packages will be installed:  
  libaio1 libevent-core-2.1-6 libhtml-template-perl mysql-client-5.7  
  mysql-client-core-5.7 mysql-common mysql-server-5.7 mysql-server-core-5.7  
Suggested packages:  
  libipc-sharedcache-perl mailx tinycd  
The following NEW packages will be installed:  
  libaio1 libevent-core-2.1-6 libhtml-template-perl mysql-client-5.7  
  mysql-client-core-5.7 mysql-common mysql-server mysql-server-5.7  
  mysql-server-core-5.7  
0 upgraded, 9 newly installed, 0 to remove and 120 not upgraded.  
Need to get 19.1 MB of archives.  
After this operation, 155 MB of additional disk space will be used.  
Do you want to continue? [Y/n] Y
```

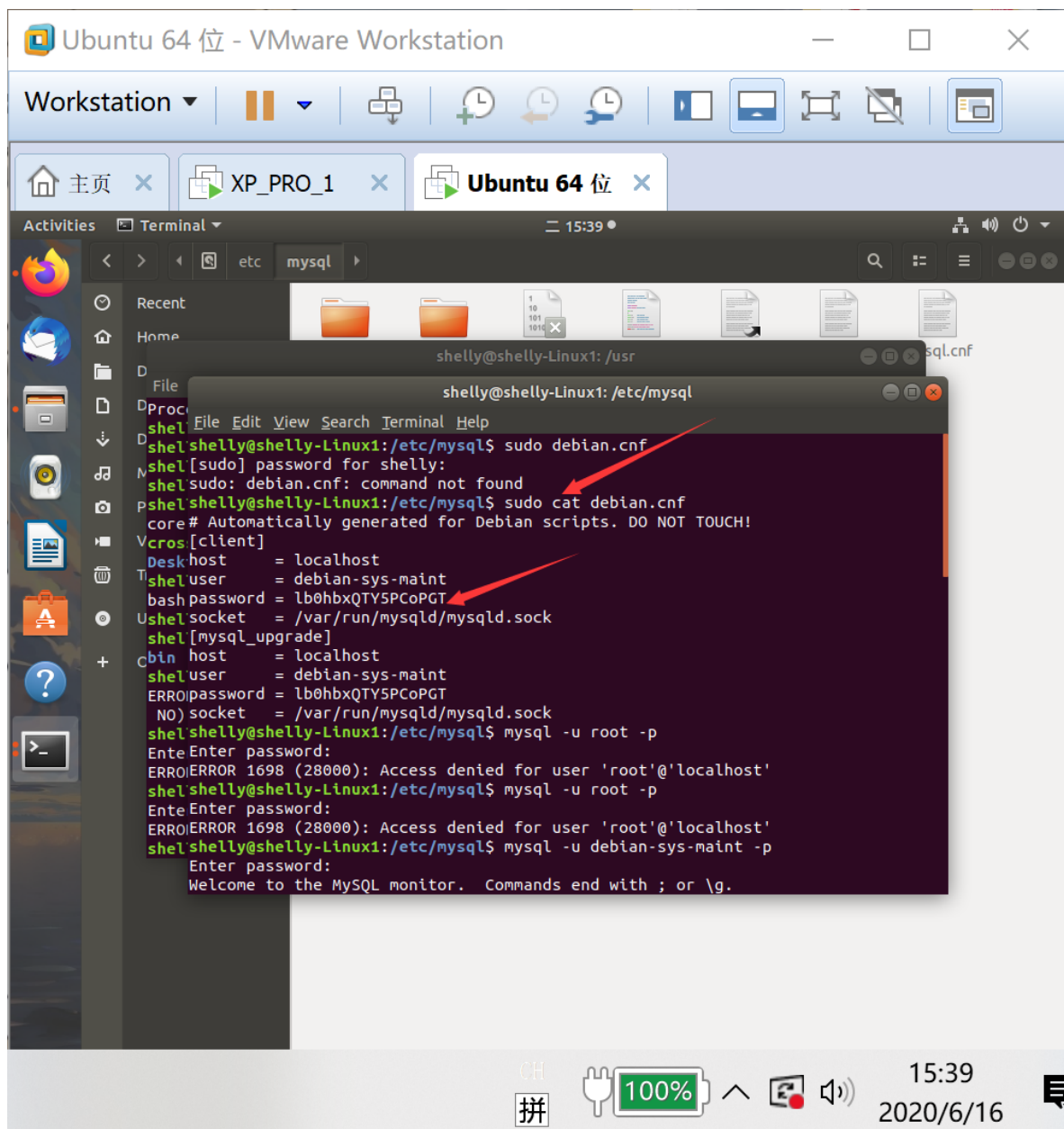
## 整合MySQL和php

```
shelly@shelly-Linux1: /usr  
File Edit View Search Terminal Help  
Processing triggers for systemd (237-3ubuntu10.39) ...  
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...  
Processing triggers for ureadahead (0.100.0-21) ...  
shelly@shelly-Linux1:~$ sudo apt install php7.2-mysql  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  efibootmgr libfwup1 libwayland-egl1-mesa  
Use 'sudo apt autoremove' to remove them.  
The following NEW packages will be installed:  
  php7.2-mysql  
0 upgraded, 1 newly installed, 0 to remove and 120 not upgraded.  
Need to get 117 kB of archives.  
After this operation, 449 kB of additional disk space will be used.  
Get:1 http://mirrors.aliyun.com/ubuntu bionic-security/main amd64 php7.2-mysql  
amd64 7.2.24-0ubuntu0.18.04.6 [117 kB]  
Fetched 117 kB in 0s (782 kB/s)  
Selecting previously unselected package php7.2-mysql.  
(Reading database ... 90%  
(Reading database ... 172659 files and directories currently installed.)  
Preparing to unpack .../php7.2-mysql_7.2.24-0ubuntu0.18.04.6_amd64.deb ...  
Unpacking php7.2-mysql (7.2.24-0ubuntu0.18.04.6) ...  
Setting up php7.2-mysql (7.2.24-0ubuntu0.18.04.6) ...
```

## MySQL密码设置:

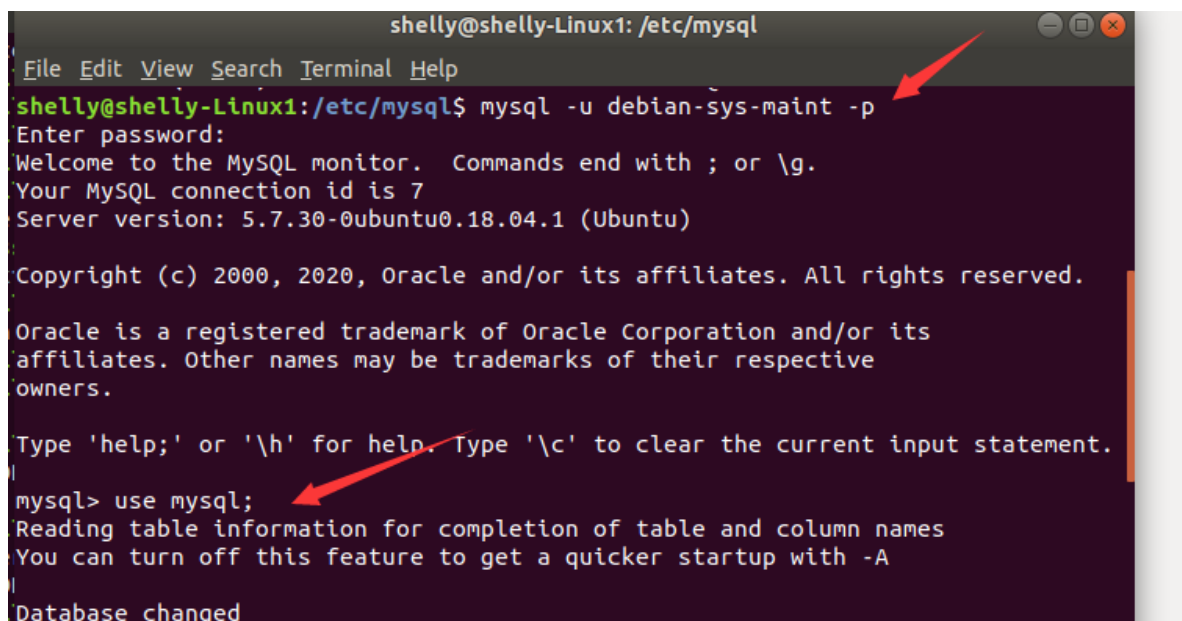
进入/etc/mysql 目录下, 找出初始密码:





使用该用户名和密码登录后进行密码重置:

1: use mysql;



2:update mysql.user set authentication\_string=password('

此处设计自己密码') where user = 'root' and Host = 'localhost';

```
mysql> update mysql.user set authentication_string=password('596512') where user = 'root' and Host = 'localhost';
Query OK, 1 row affected, 1 warning (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 1
```

3:刷新权限

```
mysql> update user set plugin='mysql_native_password';
Query OK, 1 row affected (0.00 sec)
Rows matched: 4  Changed: 1  Warnings: 0

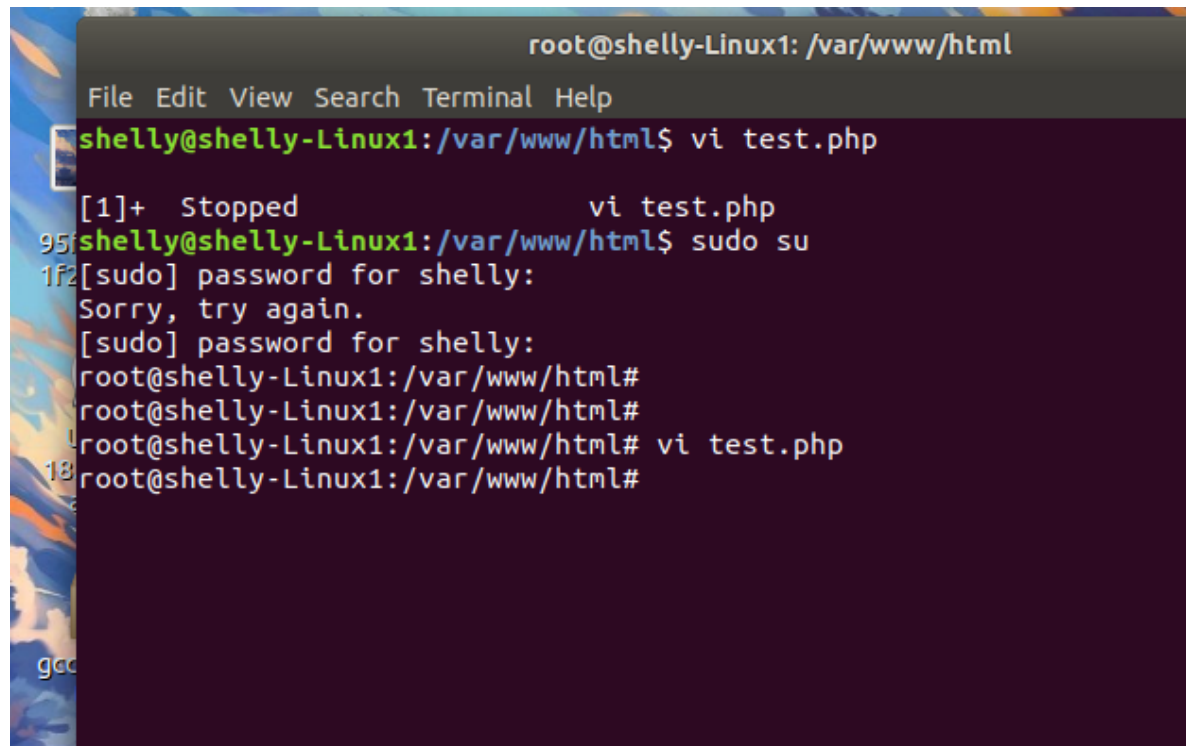
mysql> flush privileges;
Query OK, 0 rows affected (0.00 sec)
```

4.quit后即可使用设置的root账户登录

至此安装完毕，下测试PHP环境

## 测试

进入var/www/html 新建test.php文件，选择root用户权限

A terminal window titled 'root@shelly-Linux1: /var/www/html'. The user 'shelly' runs 'vi test.php'. The terminal shows the user switching to root with 'sudo su', entering a password, and then running 'vi test.php' as root. The prompt changes from '\$' to '#'.

```
root@shelly-Linux1: /var/www/html
File Edit View Search Terminal Help
shelly@shelly-Linux1:/var/www/html$ vi test.php
[1]+  Stopped                  vi test.php
95 shelly@shelly-Linux1:/var/www/html$ sudo su
1f2[sudo] password for shelly:
Sorry, try again.
[sudo] password for shelly:
root@shelly-Linux1:/var/www/html#
root@shelly-Linux1:/var/www/html#
root@shelly-Linux1:/var/www/html# vi test.php
18 root@shelly-Linux1:/var/www/html#
```

test.php内容为:

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

保存后可访问:

本机:

Ubuntu 64 位 - VMware Workstation

Workstation ▾

Activities Firefox Web Browser 15:27 • phpinfo() - Mozilla Firefox

phpinfo()

localhost/test.php

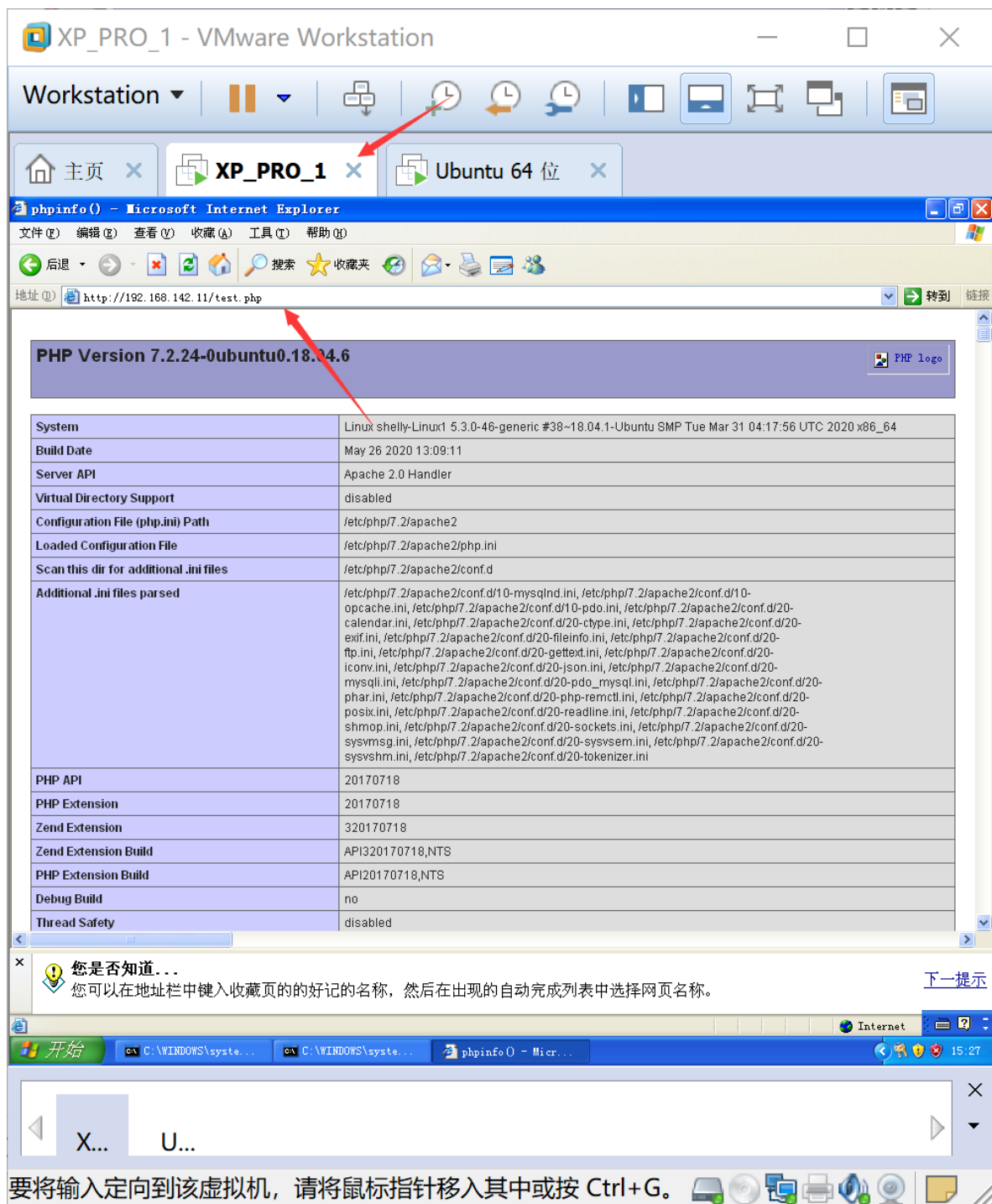
PHP Version 7.2.24-0ubuntu0.18.04.6

System	Linux shelly-Linux1 5.3.0-46-generic #38~18.04.1-Ubuntu SMP Tue Mar 31 04:17:56 UTC 2020 x86_64
Build Date	May 26 2020 13:09:11
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/7.2/apache2
Loaded Configuration File	/etc/php/7.2/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/7.2/apache2/conf.d
Additional .ini files parsed	/etc/php/7.2/apache2/conf.d/10-mysqlnd.ini, /etc/php/7.2/apache2/conf.d/10-opcache.ini, /etc/php/7.2/apache2/conf.d/10-pdo.ini, /etc/php/7.2/apache2/conf.d/20-calendar.ini, /etc/php/7.2/apache2/conf.d/20-ctype.ini, /etc/php/7.2/apache2/conf.d/20-exif.ini, /etc/php/7.2/apache2/conf.d/20-fileinfo.ini, /etc/php/7.2/apache2/conf.d/20-ftp.ini, /etc/php/7.2/apache2/conf.d/20-gettext.ini, /etc/php/7.2/apache2/conf.d/20-iconv.ini, /etc/php/7.2/apache2/conf.d/20-json.ini, /etc/php/7.2/apache2/conf.d/20-mysqli.ini, /etc/php/7.2/apache2/conf.d/20-pdo_mysql.ini, /etc/php/7.2/apache2/conf.d/20-phar.ini, /etc/php/7.2/apache2/conf.d/20-php-remctl.ini, /etc/php/7.2/apache2/conf.d/20-posix.ini, /etc/php/7.2/apache2/conf.d/20-readline.ini, /etc/php/7.2/apache2/conf.d/20-shmop.ini, /etc/php/7.2/apache2/conf.d/20-sockets.ini, /etc/php/7.2/apache2/conf.d/20-sysmsg.ini, /etc/php/7.2/apache2/conf.d/20-sysvsem.ini, /etc/php/7.2/apache2/conf.d/20-sysvshm.ini, /etc/php/7.2/apache2/conf.d/20-tokenizer.ini
PHP API	20170718
PHP Extension	20170718
Zend Extension	320170718
Zend Extension Build	API320170718,NTS
PHP Extension Build	API20170718,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled

W... W... W... X... U...

要将输入定向到该虚拟机，请将鼠标指针移入其中或按 Ctrl+G。

其他主机：

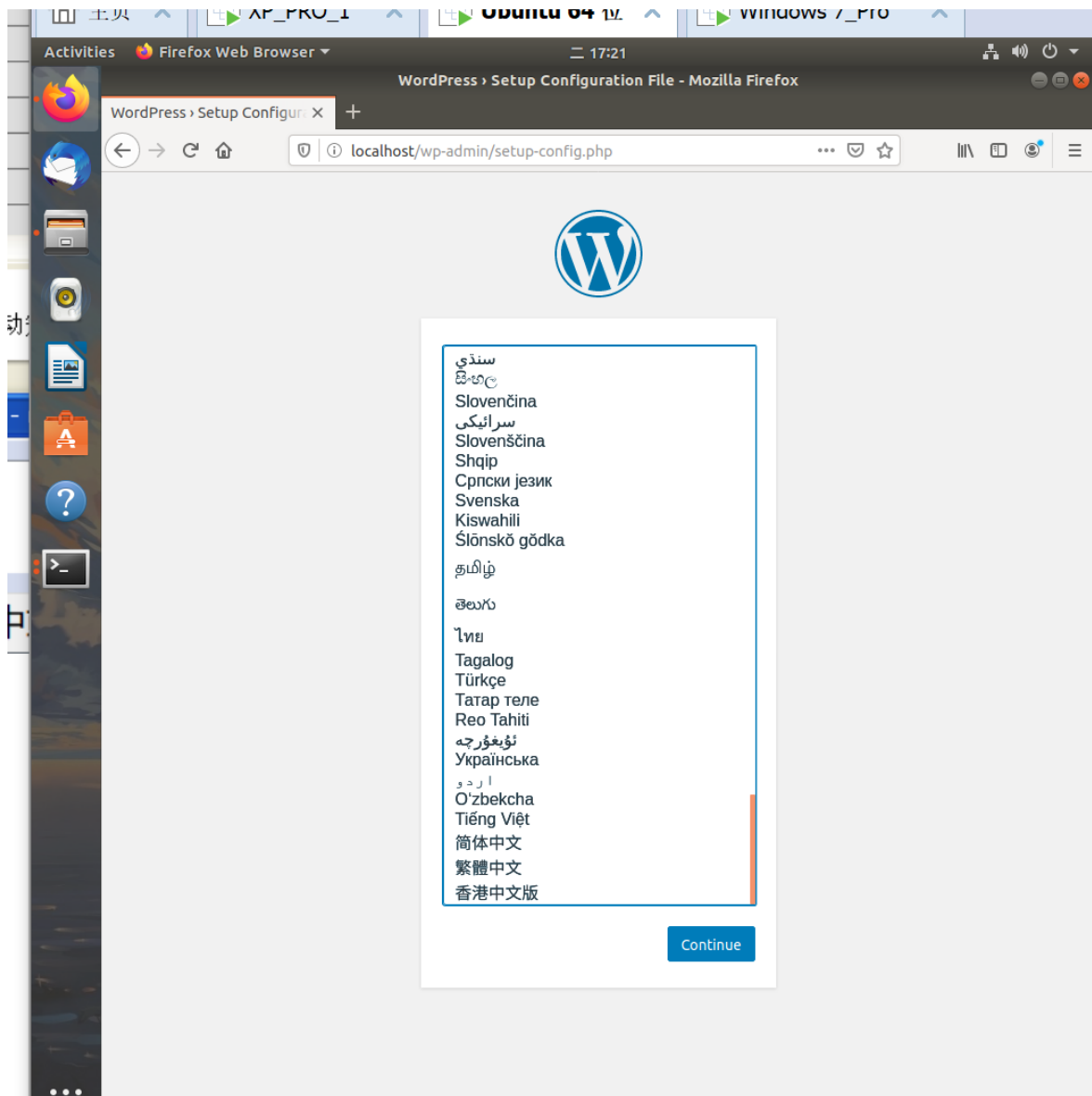


## 部署wordpress服务:

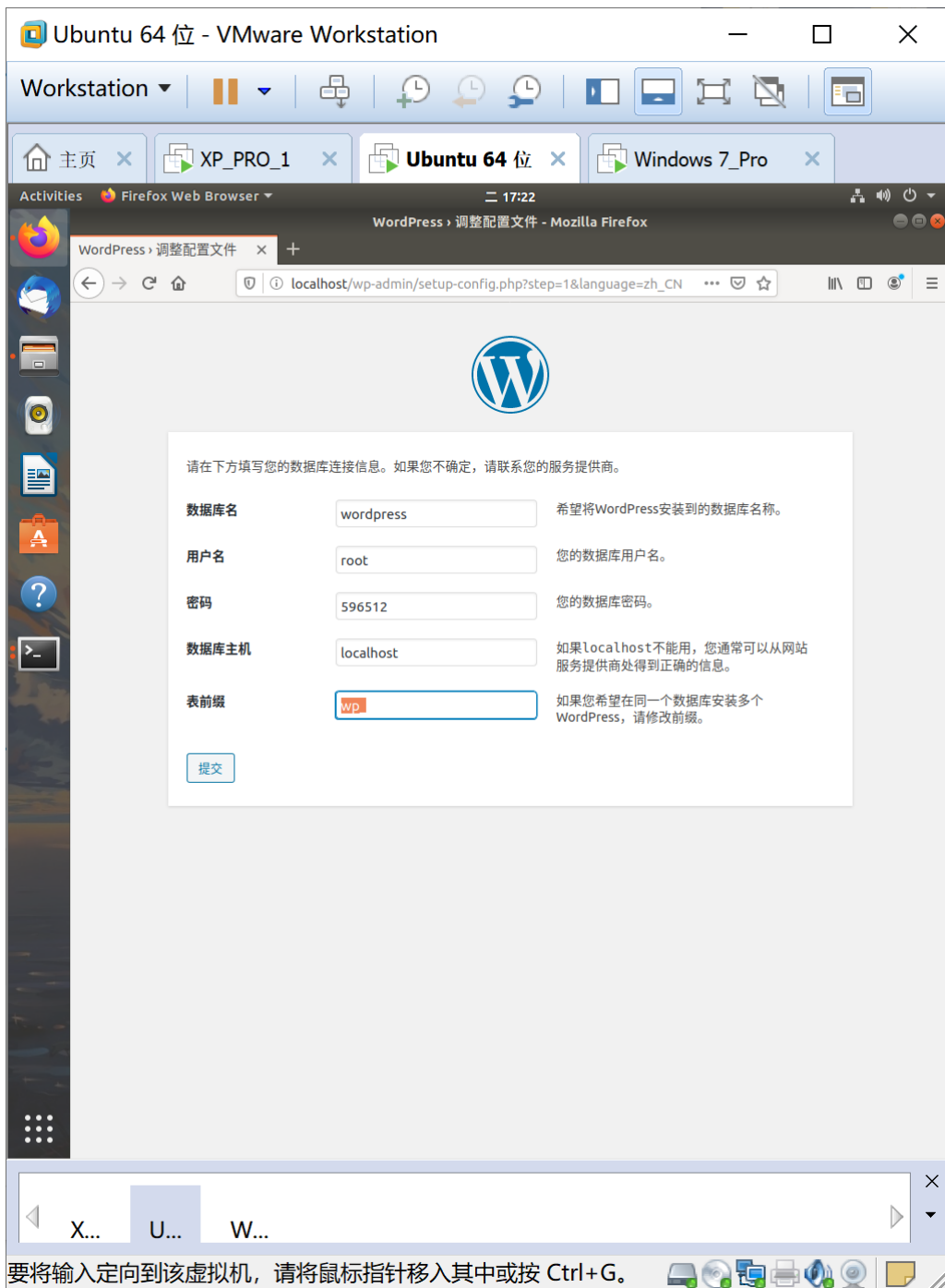
下载和解压以及数据库配置略去

直接访问本地IP:





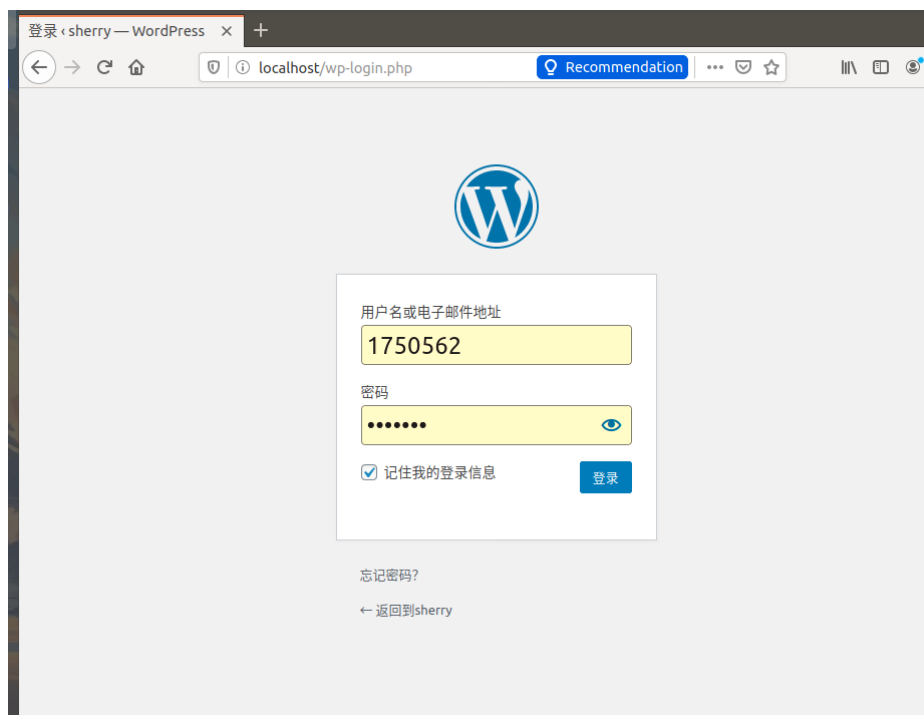
配置参数:



设置站点信息：



配置完毕即可登录:





至此，lamp环境搭建与wordpress web服务配置均完成。