

PHP Stack on Linux Image Guide

Version 1.0.0

This is the PHP Stack on Linux Image Guide of Websoft9, the image including LNMP Stack, LAMP Stack, etc.

For more technical support, please go to <http://en.websoft9.com/support>

Environment description

After loading the image, to access, using the following URL

http://< Public net IP >

Image Feature:

1. Source compiler installation, download the latest and most stable version from the official, security optimization
2. Providing multiple PHP versions (php-7, php-5.6, php-5.5, php-5.4, php-5.3)
3. jemalloc optimize MySQL
4. Providing add a virtual host script, include Let's Encrypt SSL certificate
5. Add ftp account to nginx via the shell script menu
6. Provide MySQL, PHP, Redis, Memcached, phpMyAdmin upgrade script
7. Provide local backup and remote backup (rsync between servers) | Alibaba cloud OSS backup (Intranet) script

Application version

LNMP 7.0.15: Nginx 1.10.3, PHP 7.0.15, MySQL 5.6.35, Redis 3.2.6, Memcached 1.4.34, Jemalloc 4.4.0, Pure-FTPd 1.0.43, phpMyAdmin 4.4.15.9

LAMP 7.0.15: Apache 2.4.23, PHP 7.0.15, MySQL 5.6.35, Redis 3.2.6, Memcached 1.4.34, Jemalloc 4.4.0, Pure-FTPd 1.0.43, phpMyAdmin 4.4.15.9

Application Directories

Nginx install directory: `/usr/local/nginx`

Apache install directory: `/usr/local/apache`

Database install directory: `/usr/local/mysql` or `/usr/local/mariadb`

Database data directory: `/data/mysql` or `/data/mariadb`

Database Configuration File: `/etc/my.cnf`

PHP install directory: `/usr/local/php`

PHP Configuration Path: `/usr/local/php/etc`

PHP Configuration File: `/usr/local/php/etc/php.ini`

PHP Additional .ini File: `/usr/local/php/etc/php.d`

Memcached install directory: `/usr/local/memcached`

Memcached Configuration File: `/etc/init.d/memcached`

Redis install directory: `/usr/local/redis`

Redis Configuration File: `/usr/local/redis/etc/redis.conf`

Web Context document root: `/data/wwwroot/default`

phpMyAdmin install directory: `/data/wwwroot/default/phpMyAdmin`

Web logs directory: `/data/wwwlogs`

The default ip direct access to the contents of the corresponding root directory: `/data/wwwroot/default` | This directory contains the home page, demo, Opcache Control Panel, phpinfo, phpmyadmin, Probes and other documents | Directory inside the file can be deleted, the directory can not be deleted.

How to manage service

Nginx: `service nginx {start|stop|status|restart|reload|configtest}`

MySQL: `service mysqld {start|stop|restart|reload|status}`

PHP: `service php-fpm {start|stop|restart|reload|status}`

Pure-Ftpd: `service pureftpd {start|stop|restart|status}`

Redis: `service redis-server {start|stop|status|restart|reload}`

Memcached: `service memcached {start|stop|status|restart|reload}`

Apache: `service httpd {start|stop|status|restart|reload}`

Default database password

Get database password command:

```
cd /root/oneinstack
grep dbrootpwd options.conf
```

default user/password root/123456

How to manage MySQL

How to manage MySQL: [click here](#).

How to manage virtual host

How to add a virtual host

```
cd /root/oneinstack
./vhost.sh #NOTE: If no SSL certificate is purchased!SSL under Nginx please
```

```
[root@i2bp1i4rjdsy216yq71gucZ ~]# cd /root/oneinstack
[root@i2bp1i4rjdsy216yq71gucZ oneinstack]# ./vhost.sh

#####
#   OneinStack for CentOS/RadHat 5+ Debian 6+ and Ubuntu 12+   #
#   For more information please visit https://oneinstack.com   #
#####

Please choose to use environment:
  1. Use php
  2. Use hhvm
Please input a number:(Default 1 press Enter) 1

Do you want to setup SSL under Apache? [y/n]: n

Please input domain(example: www.example.com): gj.websoft9.cn   Use your domain name

Please input the directory for the domain:gj.websoft9.cn :
(Default directory: /data/wwwroot/gj.websoft9.cn) : /data/wwwroot/default/opencart

Create Virtul Host directory.....
set permissions of Virtual Host directory.....
domain=gj.websoft9.cn

Do you want to add more domain name? [y/n]: n

Allow Apache access_log? [y/n]: y
You access log file=/data/wwwlogs/gj.websoft9.cn_apache.log

Syntax OK
Restart Apache.....

#####
#   OneinStack for CentOS/RadHat 5+ Debian 6+ and Ubuntu 12+   #
#   For more information please visit https://oneinstack.com   #
#####
Your domain:          gj.websoft9.cn
Virtualhost conf:     /usr/local/apache/conf/vhost/gj.websoft9.cn.conf
Directory of:         /data/wwwroot/default/opencart
[root@i2bp1i4rjdsy216yq71gucZ oneinstack]#
```

How to delete a virtual host

```
cd /root/oneinstack
./vhost.sh del
```

How to deploy a website on a server

1. Create the database required for the site
2. Add a virtual host
3. Create an FTP account #Remote upload file recommended to install graphical tools:WinSCP
4. Deploy the code to the site root directory #NOTE:Ftp upload code do not need to modify permissions!default is already www;
Download the code in server , you must modify the site root and subdirectories,Directory file permissions are www; If there is a problem with site permissions

Proper permissions for files/folders

Web site root permissions to follow:

file 644 folder 755 Permissions Users and groups www

If there is a file permissions problem, execute the following three commands:

```
chown -R www:www /data/wwwroot/  
find /data/wwwroot/ -type d -exec chmod 755 {} \;  
find /data/wwwroot/ -type f -exec chmod 644 {} \;
```

How to Change your PHP Version

```
cd /root/oneinstack #Must enter the directory execution under oneinstack  
./change_php_version.sh #Do not sh change_php_version.sh such execution
```

How to upgrade

```
cd /root/oneinstack  
./upgrade.sh
```

How to uninstall

Some items can be uninstalled separately, such as RDS database, the database can be uninstalled separately

```
cd /root/oneinstack  
./uninstall.sh # NOTE: Please backup your data
```

How to manage FTP User Accounts

```
cd /root/oneinstack  
./pureftpd_vhost.sh #Do not sh pureftpd_vhost.sh such execution
```

Iptables Firewall

By default, 22 is enabled ssh 80,443 Nginx 21,20000-30000 FTP

Other ports are rejected If you need to allow other ports, please operate open 8080 port, command:

```
iptables -I INPUT 4 -p tcp -m state --state NEW -m tcp --dport 8080 -j ACCEPT  
service iptables save
```

How to add Extensions

```
cd /root/oneinstack  
./addons.sh #NOTE: Support install and uninstall function
```

PHP opcode cache

by default, in order to reduce PHP compile time, improve performance, Opcache is recommended for production environments. The PHP environment loads the Opcache module by default (PHP 5.5, 5.6, 7.0). But this will appear PHP code updates, take 2 to 3 minutes to take effect. This affects the efficiency of the site during the commissioning phase, suggest that you close or refresh the cache every time there is a code update. Recommended method two.

Method 1: Uninstall Opcache

```
cd /root/oneinstack
./addons.sh
```

Method 2: Refresh the PHP cache

Access <http://< Public net IP >/ocp.php>
Or direct access <http://< Public net IP >/ocp.php/ocp.php?RESET=1>

Migrating website from OS disk to Data disk

Note: If you purchased a data disk. And only one data disk. It is recommended to mount the data disk first. the site content, database storage data cloud disk. If there is no purchase data cloud disk, ignore the tutorial.

```
cd /root/oneinstack      #Must enter the directory execution under oneinstack
./move_auto_fdisk.sh    #mount data disk and migrate
```

How do use scripts to optimize the parameters

Because this image was build based on 1 Core 1G ECS, the configuration and parameters for MySQL/MariaDB, PHP are original without any change, highly recommended. If this is not the case, run the following optimization script:

```
cd /root/oneinstack
./optimize.sh          #Do not sh optimize.sh or bash optimize.sh such execution
```

NOTE:

1. It may take 1 minute, do not interrupt
2. This script will automatically optimize MySQL, PHP and other parameters according to the system configuration

How to backup

```
cd /root/oneinstack
./backup_setup.sh
```

Perform the backup immediately:

```
cd /root/oneinstack
./backup.sh
```

Set Scheduled Task Automatic Scheduled Backup:

Example: Can be added to scheduled tasks, such as automatic backups every day 1:00

```
# echo '0 1 * * * cd -/oneinstack;./backup.sh > /dev/null 2>&1 & ' >> /var/spool/cron/root
```

View the backup:

View the local backup:

```
ls -l /data/backup/
```