

# Lnmp 环境

V2.0 版本 操作指南

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# 一、商品说明

## 1、版本说明

此镜像为 Lnmp 环境镜像，系统：Aliyun（兼容 CentOS），更新时间 2024 年 8 月。您可以一键快速搭建自己的 Lnmp 环境服务器。

## 2、安全加固

为进一步提升云服务的安全性，我公司对镜像产品实施了全面的安全加固，共计完成 88 项基线加固措施。这些精细化的安全改进，不仅确保我们的镜像产品严格符合等保 2.0 的安全标准，更在防御外部攻击、内部漏洞修复、数据加密保护等多个安全维度上实现了显著增强，为您的数据的安全存储与业务的平稳运行提供坚实保障。选择我们的镜像产品，意味着您将获得一个经过深度安全加固、符合高标准安全要求的云端解决方案，让您的业务在安全的护航下稳健运行。

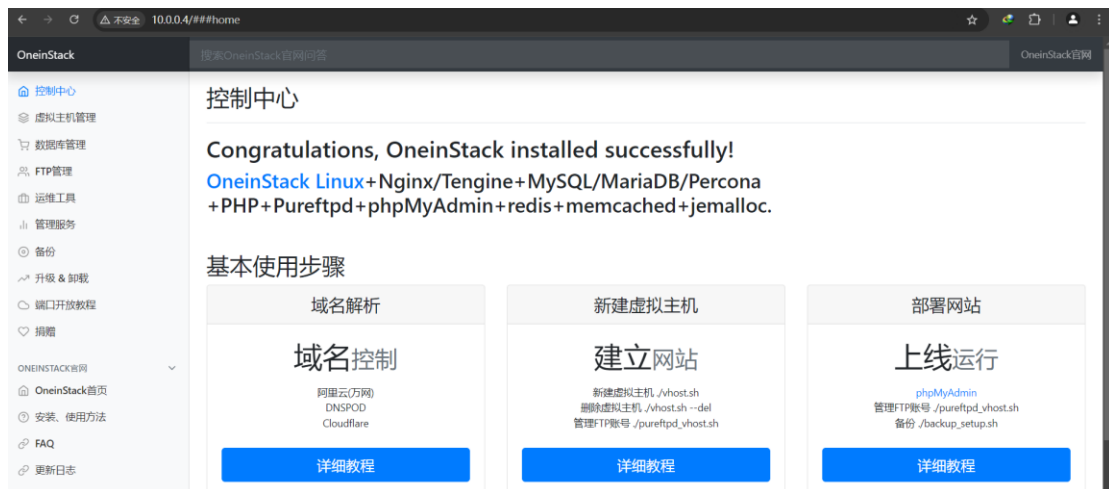
如您的业务环境有其他安全需求，请与客服联系，我们可为您提供一对一定制服务。

# 二、操作指南

## 1、Lnmp 环境信息

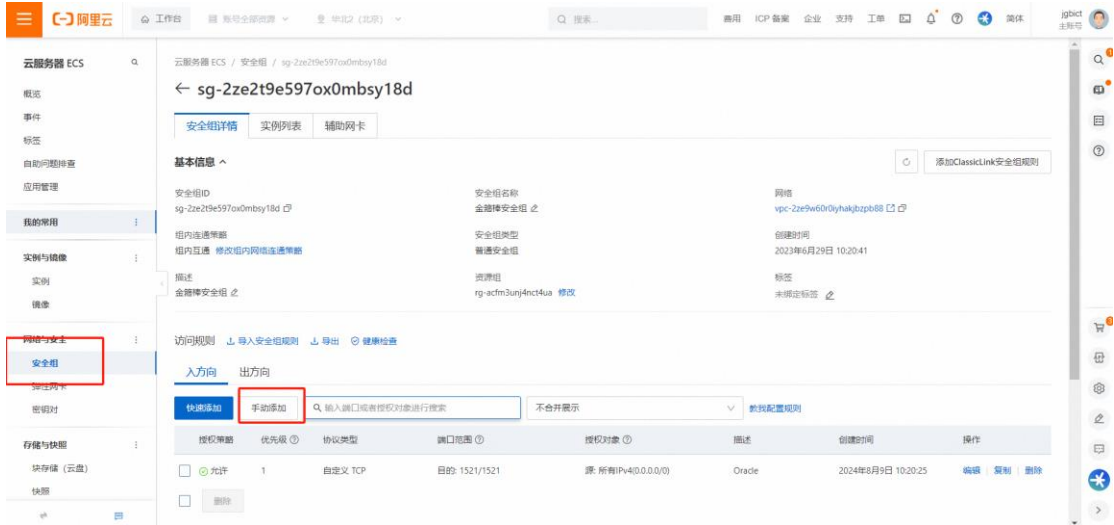
公网 IP 地址。

外网地址：<http://公网 IP>

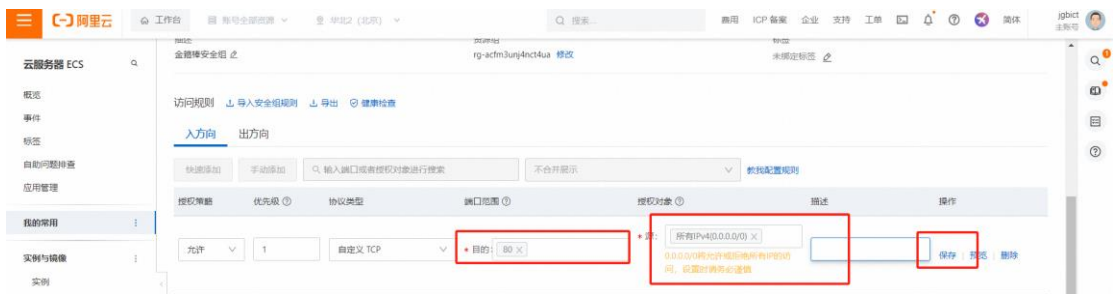


## 2、安全组开放相应的端口 80

点击阿里云 ecs，点击安全组，入方向，手动添加

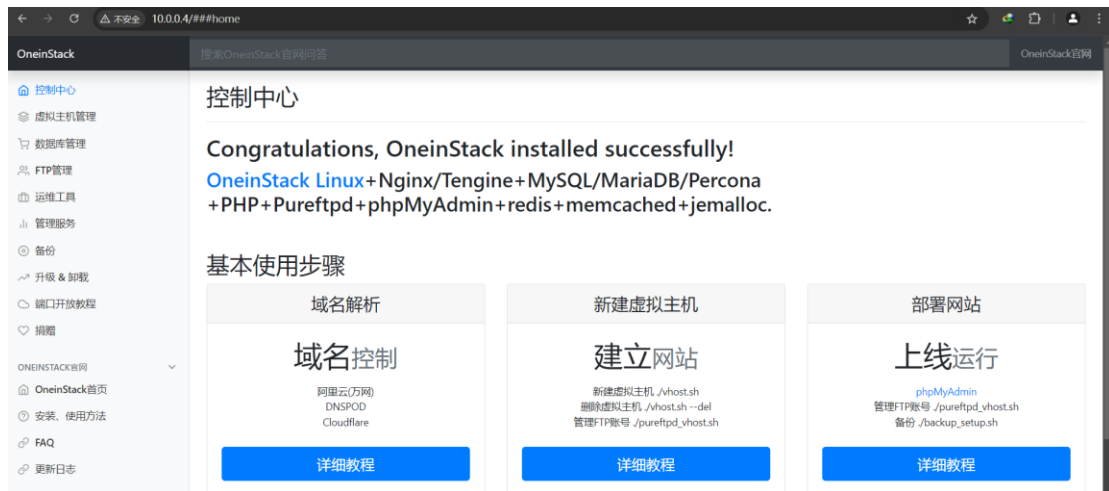


允许 TCP、端口 80、允许所有 IPv4, 保存即可。



## 3、登录 Lnmp 面板

打开浏览器，输入链接地址。



面板包含（控制中心，虚拟主机管理、数据库管理、Ftp 管理、运维工具、管理服务、备份、升级与卸载等）

#### 4、Lnmp 配置信息

Lamp 环境镜像包含(Nginx1.24.0、php 7.4.33、MySQL5.7.44、Redis 7.2.3、Memcached1.6.22、Pure-FTPd1.0.49)。

服务	版本	安装位置	配置文件	密码
Nginx	1.24.0	/usr/local/nginx	nginx.conf	
Memcached	1.6.22	/usr/local/memcached		
Mysql	5.7.44	/usr/local/mysql/	my.cnf	oracle123
Redis	7.2.3	/usr/local/redis/	redis.conf	
php	7.4.33	/usr/local/php	php.ini	
Pure-FTP	1.0.49	/usr/local/pureftpd	pure-ftp.conf	

```
Starting MySQL.. SUCCESS!
#####Congratulations#####
Total OneInStack Install Time: 21 minutes

Nginx install dir:           /usr/local/nginx
Database install dir:       /usr/local/mysql
Database data dir:         /data/mysql
Database user:              root
Database password:         oracle123

PHP install dir:            /usr/local/php
Opcache Control Panel URL:  http://10.0.2.15/ocp.php

Pure-FTPd install dir:     /usr/local/pureftpd
Create FTP virtual script: ./pureftpd_vhost.sh

phpMyAdmin dir:            /data/wwwroot/default/phpMyAdmin
phpMyAdmin Control Panel URL: http://10.0.2.15/phpMyAdmin

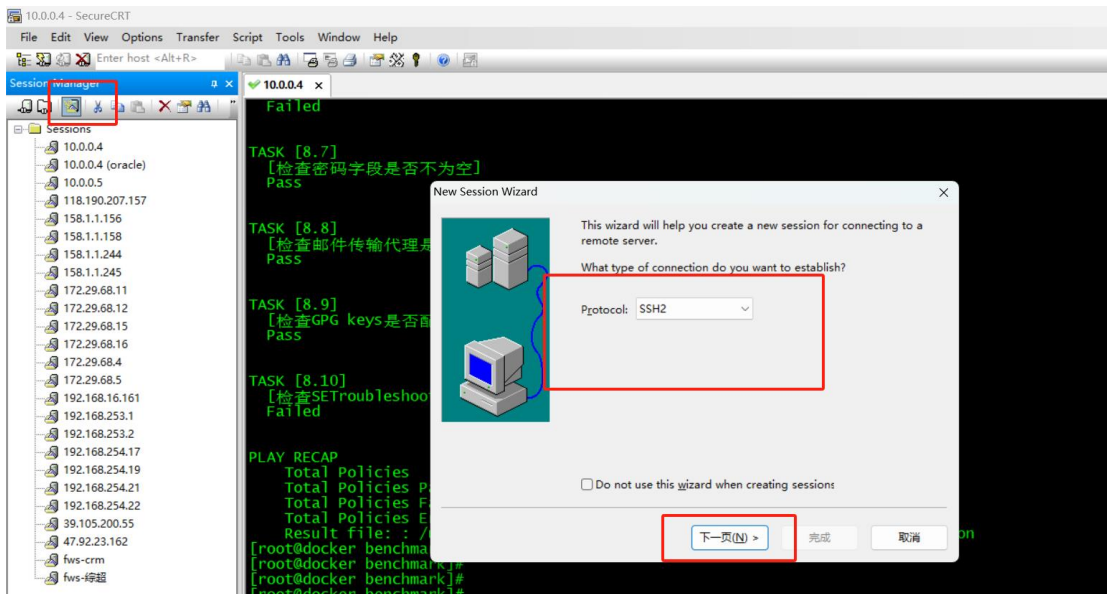
redis install dir:         /usr/local/redis
memcached install dir:     /usr/local/memcached

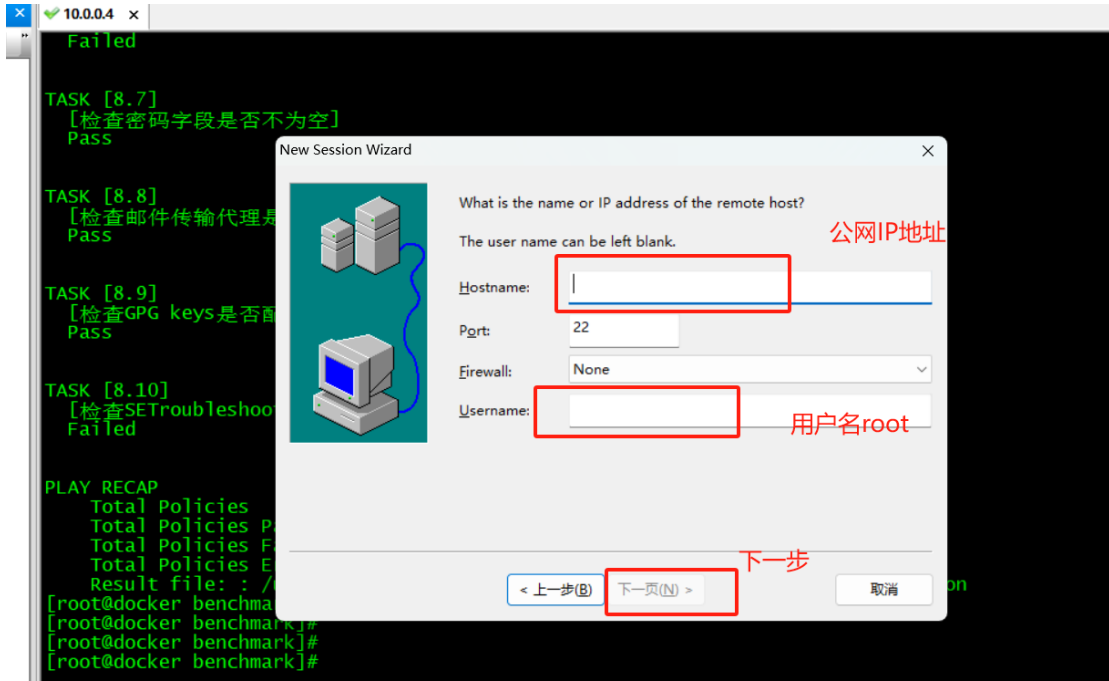
Index URL:                  http://10.0.2.15/
[root@lnmp ~]#
```

## 5、Lnmp 环境简单使用

使用 (Crt、putty、xshell 等远程工具进行链接)。

选择 ssh 协议、输入公网地址以及账户名密码，进行远程链接。



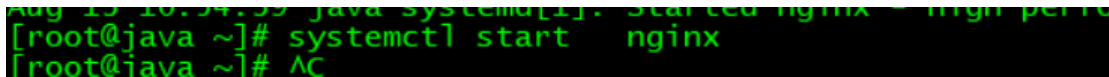


双击链接即可

执行如下命令

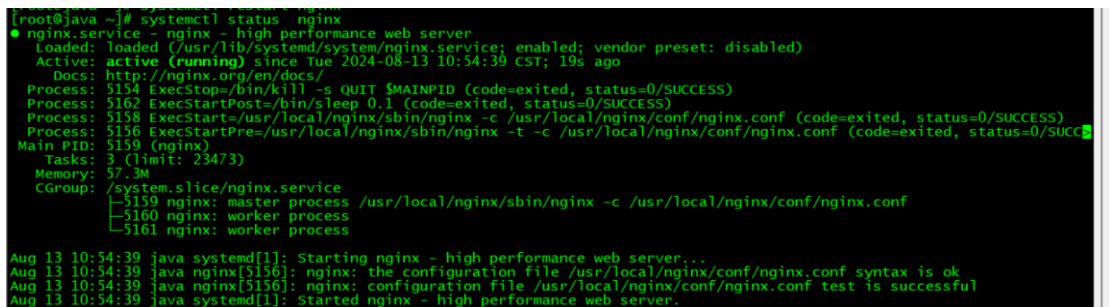
Nginx 启动

```
systemctl start nginx
```



Nginx 查询状态

```
systemctl status nginx
```



Nginx 关闭

```
systemctl stop nginx
```



Nginx 重启

```
systemctl restart nginx
```

```
[root@java ~]#  
[root@java ~]#  
[root@java ~]# systemctl restart nginx  
[root@java ~]#
```

Nginx 查询日志

```
tail -f /data/wwwlogs/error_nginx.log
```

```
[root@java ~]#  
[root@java ~]#  
[root@java ~]#  
[root@java ~]# tail -f /data/wwwlogs/error_nginx.log
```

Php 使用

Php 启动

```
systemctl start php-fpm
```

```
[root@lnmp etc]# systemctl start php-fpm  
[root@lnmp etc]#  
[root@lnmp etc]#  
[root@lnmp etc]#  
[root@lnmp etc]#  
[root@lnmp etc]#  
[root@lnmp etc]#  
[root@lnmp etc]# systemctl status php-fpm  
● php-fpm.service - The PHP FastCGI Process Manager  
   Loaded: loaded (/usr/lib/systemd/system/php-fpm.service; enabled; vendor preset: disabled)  
   Active: active (running) since Thu 2024-08-22 10:05:03 CST; 13min ago  
     Docs: http://php.net/docs.php  
   Main PID: 743 (php-fpm)  
     Tasks: 31 (limit: 23598)  
    Memory: 62.0M  
   CGroup: /system.slice/php-fpm.service  
           └─743 php-fpm: master process (/usr/local/php/etc/php-fpm.conf)  
             └─897 php-fpm: pool www  
               └─898 php-fpm: pool www  
                 └─900 php-fpm: pool www  
                   └─901 php-fpm: pool www  
                     └─902 php-fpm: pool www  
                       └─903 php-fpm: pool www  
                         └─904 php-fpm: pool www  
                           └─905 php-fpm: pool www  
                             └─906 php-fpm: pool www  
                               └─907 php-fpm: pool www  
                                 └─908 php-fpm: pool www  
                                   └─909 php-fpm: pool www  
                                     └─910 php-fpm: pool www  
                                       └─911 php-fpm: pool www
```

php-fpm 查看

```
systemctl status php-fpm
```



```
[root@lnmp etc]# systemctl status php-fpm
● php-fpm.service - The PHP FastCGI Process Manager
   Loaded: loaded (/usr/lib/systemd/system/php-fpm.service; enabled; vendor preset: enabled)
   Active: active (running) since Thu 2024-08-22 10:05:03 CST; 13min ago
     Docs: http://php.net/docs.php
    Main PID: 743 (php-fpm)
      Tasks: 31 (limit: 23598)
     Memory: 62.0M
    CGroup: /system.slice/php-fpm.service
            └─743 php-fpm: master process (/usr/local/php/etc/php-fpm.conf)
              └─897 php-fpm: pool www
                └─898 php-fpm: pool www
                  └─900 php-fpm: pool www
                    └─901 php-fpm: pool www
                      └─902 php-fpm: pool www
                        └─903 php-fpm: pool www
                          └─904 php-fpm: pool www
                            └─905 php-fpm: pool www
                              └─906 php-fpm: pool www
                                └─907 php-fpm: pool www
                                  └─908 php-fpm: pool www
                                    └─909 php-fpm: pool www
                                      └─910 php-fpm: pool www
                                        └─911 php-fpm: pool www
                                          └─912 php-fpm: pool www
                                            └─913 php-fpm: pool www
                                              └─914 php-fpm: pool www
                                                └─915 php-fpm: pool www
                                                  └─916 php-fpm: pool www
```

php-fpm 关闭

```
systemctl stop php-fpm
```

```
systemctl status php-fpm
```

```
[root@lnmp etc]# systemctl stop php-fpm
[root@lnmp etc]#
[root@lnmp etc]#
[root@lnmp etc]#
[root@lnmp etc]# systemctl status php-fpm
● php-fpm.service - The PHP FastCGI Process Manager
   Loaded: loaded (/usr/lib/systemd/system/php-fpm.service; enabled; vendor preset: disabled)
   Active: inactive (dead) since Thu 2024-08-22 10:20:47 CST; 2s ago
     Docs: http://php.net/docs.php
    Process: 743 ExecStart=/usr/local/php/sbin/php-fpm --nodaemonize --fpm-config /usr/local/php/
    Main PID: 743 (code=exited, status=0/SUCCESS)

Aug 22 10:05:03 lnmp systemd[1]: Started The PHP FastCGI Process Manager.
Aug 22 10:20:47 lnmp systemd[1]: Stopping The PHP FastCGI Process Manager...
Aug 22 10:20:47 lnmp systemd[1]: php-fpm.service: Succeeded.
Aug 22 10:20:47 lnmp systemd[1]: Stopped The PHP FastCGI Process Manager.
lines 1-11/11 (END)
```

php-fpm 日志

```
cd /usr/local/php/var/log
```

```
tail -f php-fpm.log
```

```
[root@lnmp log]# pwd
/usr/local/php/var/log
[root@lnmp log]# tail -f php-fpm.log
```

Mysql 使用

Mysql 启动

systemctl start mysql

```
[root@java logs]#
[root@java logs]# systemctl start mysql
[root@java logs]#
[root@java logs]#
[root@java logs]#
[root@java logs]#
[root@java logs]#
```

Mysql 关闭

systemctl stop mysql

```
[root@java logs]#
[root@java logs]#
[root@java logs]# systemctl stop mysql
[root@java logs]#
[root@java logs]#
```

Mysql 运行状态

systemctl status mysql

```
[root@java logs]# systemctl status mysql
● mysqld.service - LSB: start and stop MySQL
   Loaded: loaded (/etc/rc.d/init.d/mysqld; generated)
   Active: active (running) since Tue 2024-08-13 11:36:22 CST; 5s ago
     Docs: man:systemd-sysv-generator(8)
   Process: 5717 ExecStop=/etc/rc.d/init.d/mysqld stop (code=exited, status=0/SUCCESS)
   Process: 5758 ExecStart=/etc/rc.d/init.d/mysqld start (code=exited, status=0/SUCCESS)
    Tasks: 28 (limit: 23473)
   Memory: 234.4M
   CGroup: /system.slice/mysqld.service
           └─5771 /bin/sh /usr/local/mysql/bin/mysqld_safe --datadir=/data/mysql --pid-file=/data/mysql/mysql.pid
             └─6612 /usr/local/mysql/bin/mysqld --basedir=/usr/local/mysql --datadir=/data/mysql --plugin-dir=/usr/local/mysql

Aug 13 11:36:20 java systemd[1]: Starting LSB: start and stop MySQL...
Aug 13 11:36:22 java mysqld[5758]: Starting MySQL.. SUCCESS!
Aug 13 11:36:22 java systemd[1]: Started LSB: start and stop MySQL.
```

## Mysql 登录

```
mysql -uroot -poracle123
```

```
[root@java ~]# mysql -uroot -poracle123
mysql: [Warning] Using a password on the command line interface can be insecure.
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 2
Server version: 5.7.44-log MySQL Community Server (GPL)

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MySQL [(none)]>
MySQL [(none)]>
MySQL [(none)]>
MySQL [(none)]>
```

## Mysql 日志

```
cd /data/mysql
```

```
tail -f mysql-error.log
```

```
[root@java mysql]# pwd
/data/mysql
[root@java mysql]# tail -f mysql-error.log
2024-08-13T03:41:28.478279Z 0 [Warning] A deprecated TLS version TLSv1.1 is enabled. Please use TLSv1.2 or higher.
2024-08-13T03:41:28.487538Z 0 [Warning] CA certificate ca.pem is self signed.
2024-08-13T03:41:28.487538Z 0 [Note] Skipping generation of RSA key pair as key files are present in data directory.
2024-08-13T03:41:28.491349Z 0 [Note] Server hostname (bind-address): '0.0.0.0'; port: 3306
2024-08-13T03:41:28.491382Z 0 [Note] - '0.0.0.0' resolves to '0.0.0.0';
2024-08-13T03:41:28.491406Z 0 [Note] Server socket created on IP: '0.0.0.0'.
2024-08-13T03:41:28.519261Z 0 [Note] Failed to start slave threads for channel ''
2024-08-13T03:41:28.556950Z 0 [Note] Event Scheduler: Loaded 0 events
2024-08-13T03:41:28.557276Z 0 [Note] /usr/local/mysql/bin/mysqld: ready for connections.
Version: '5.7.44-log' socket: '/tmp/mysql.sock' port: 3306 MySQL Community Server (GPL)
```

## Mysql 配置文件

```
more /etc/my.cnf
```

```
[root@java mysql]# more /etc/my.cnf
[client]
port = 3306
socket = /tmp/mysql.sock

[mysql]
prompt="MySQL [\d]> "
no-auto-rehash

[mysqld]
port = 3306
socket = /tmp/mysql.sock

basedir = /usr/local/mysql
datadir = /data/mysql
pid-file = /data/mysql/mysql.pid
user = mysql
bind-address = 0.0.0.0
server-id = 1

init-connect = 'SET NAMES utf8mb4'
character-set-server = utf8mb4

skip-name-resolve
#skip-networking
back_log = 300

max_connections = 1241
max_connect_errors = 6000
```

Redis 使用

redis 启动

/usr/local/redis/bin/redis-server 127.0.0.1:6379

```
[root@java mysql]# ps -ef | grep redis
redis 834 1 0 11:41 ? 00:00:36 /usr/local/redis/bin/redis-server 127.0.0.1:6379
root 4640 3151 0 14:01 pts/0 00:00:00 grep --color redis
[root@java mysql]#
```

redis 查看运行

ps -ef | grep redis

```
[root@java mysql]# ps -ef | grep redis
redis 834 1 0 11:41 ? 00:00:36 /usr/local/redis/bin/redis-server 127.0.0.1:6379
root 4640 3151 0 14:01 pts/0 00:00:00 grep --color redis
[root@java mysql]#
```

redis 链接

redis-cli

127.0.0.1:6379> info

```
[root@java mysql]#  
[root@java mysql]# redis-cli  
127.0.0.1:6379> info  
# Server  
redis_version:7.2.3  
redis_git_sha1:00000000  
redis_git_dirty:0  
redis_build_id:d6a40250e7ccef1b  
redis_mode:standalone  
os:Linux 5.10.134-13.an8.x86_64 x86_64  
arch_bits:64  
monotonic_clock:POSIX clock_gettime  
multiplexing_api:epoll  
atomicvar_api:c11-builtin  
gcc_version:8.5.0  
process_id:834  
process_supervised:no  
run_id:b4dc5dea22a8f0a892cdeb08cdc34f79301abb91  
tcp_port:6379  
server_time_usec:1723529009835216  
uptime_in_seconds:8526  
uptime_in_days:0  
hz:10  
configured_hz:10  
lru_clock:12252977  
executable:/usr/local/redis/bin/redis-server  
config_file:/usr/local/redis/etc/redis.conf  
io_threads_active:0  
listener0:name=tcp,bind=127.0.0.1,bind=-:::1,port=6379
```

redis 配置文件

/usr/local/redis/etc/redis.conf

```
[root@java mysql]# more /usr/local/redis/etc/redis.conf  
# Redis configuration file example.  
#  
# Note that in order to read the configuration file, Redis must be  
# started with the file path as first argument:  
# ./redis-server /path/to/redis.conf  
  
# Note on units: when memory size is needed, it is possible to specify  
# it in the usual form of 1k 5GB 4M and so forth:  
#  
# 1k => 1000 bytes  
# 1kb => 1024 bytes  
# 1m => 1000000 bytes  
# 1mb => 1024*1024 bytes  
# 1g => 1000000000 bytes  
# 1gb => 1024*1024*1024 bytes  
#  
# units are case insensitive so 1GB 1Gb 1gB are all the same.  
  
##### INCLUDES #####  
  
# Include one or more other config files here. This is useful if you  
# have a standard template that goes to all Redis servers but also need  
# to customize a few per-server settings. Include files can include  
# other files, so use this wisely.  
#  
# Note that option "include" won't be rewritten by command "CONFIG REWRITE"  
# from admin or Redis Sentinel. Since Redis always uses the last processed  
# line as value of a configuration directive, you'd better put includes
```

关闭 redis

查询 redis 进程号, 然后 kill -9 进程号

```
ps -ef | grep redis
```

kill -9 进程号

```
[root@java mysql]# ps -ef | grep redis
redis 834 1 0 11:41 ? 00:00:37 /usr/local/redis/bin/redis-server 127.0.0.1:6379
root 4680 3151 0 14:05 pts/0 00:00:00 grep --color redis
[root@java mysql]#
[root@java mysql]#
[root@java mysql]# kill -9 834
```

## 6、常规错误如何排查

首先重启相关服务是否正常。

Nginx:

```
systemctl restart nginx
```

MySQL:

```
systemctl restart mysqld
```

php-fpm:

```
systemctl restart php-fpm
```

Pure-Ftpd:

```
systemctl restart pureftpd
```

Redis:

```
systemctl restart redis-server
```

Memcached:

```
systemctl restart memcached
```

查看相关服务状态

Nginx:

```
systemctl status nginx
```

MySQL:

```
systemctl status mysqld
```

php-fpm:

```
systemctl status php-fpm
```

Pure-Ftpd:

```
systemctl status pureftpd
```

Redis:

```
systemctl status redis-server
```

Memcached:

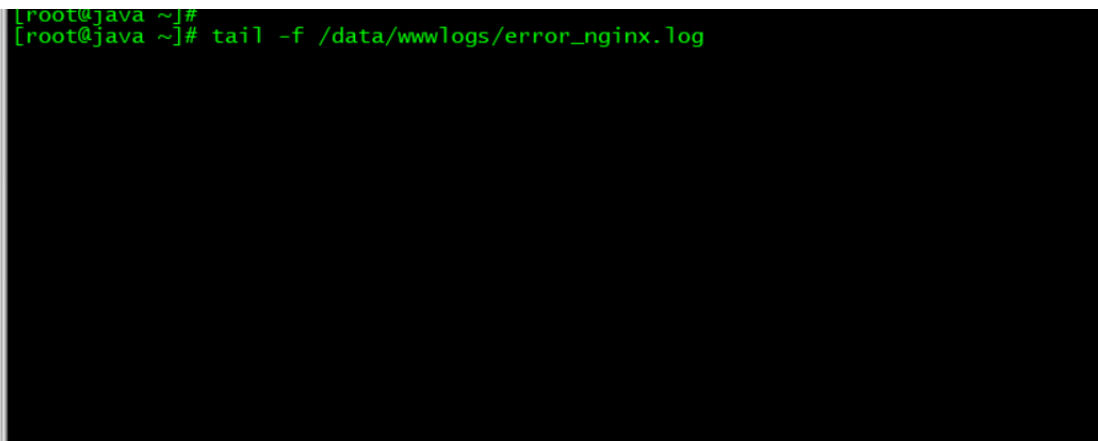
```
systemctl status memcached
```

查看相关服务的日志

Nginx:

```
tail -f /data/wwwlogs/error_nginx.log
```

```
[root@java ~]#  
[root@java ~]# tail -f /data/wwwlogs/error_nginx.log
```



MySQL:

```
cd /data/mysql
```

```
tail -f mysql-error.log
```

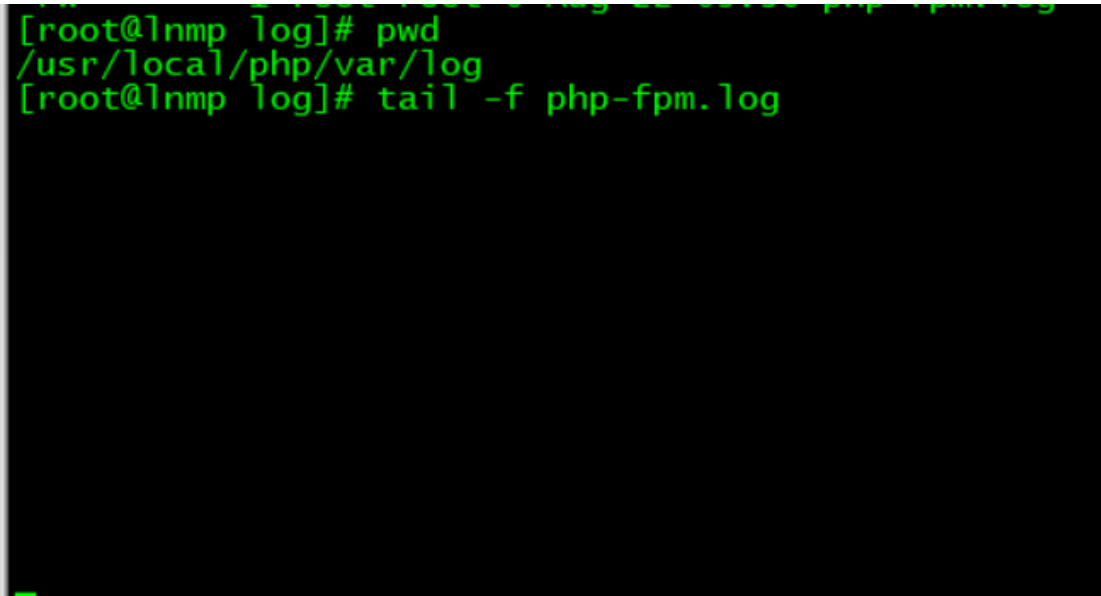
```
[root@java ~]#  
[root@java ~]# cd /data/mysql  
[root@java mysql]#  
[root@java mysql]#  
[root@java mysql]# tail -f mysql-error.log  
2024-08-13T03:41:28.478279Z 0 [warning] A deprecated TLS version TLSv1.1 is enabled. Please use TLSv1.2 or higher.  
2024-08-13T03:41:28.487538Z 0 [warning] CA certificate ca.pem is self signed.  
2024-08-13T03:41:28.487538Z 0 [Note] Skipping generation of RSA key pair as key files are present in data directory.  
2024-08-13T03:41:28.491349Z 0 [Note] Server hostname (bind-address): '0.0.0.0'; port: 3306  
2024-08-13T03:41:28.491382Z 0 [Note] - '0.0.0.0' resolves to '0.0.0.0';  
2024-08-13T03:41:28.491406Z 0 [Note] Server socket created on IP: '0.0.0.0'.  
2024-08-13T03:41:28.519261Z 0 [Note] Failed to start slave threads for channel ''  
2024-08-13T03:41:28.556950Z 0 [Note] Event Scheduler: Loaded 0 events  
2024-08-13T03:41:28.557276Z 0 [Note] /usr/local/mysql/bin/mysqld: ready for connections.  
Version: '5.7.44-log' socket: '/tmp/mysql.sock' port: 3306 MySQL Community Server (GPL)
```



php-fpm:

```
cd /usr/local/php/var/log
```

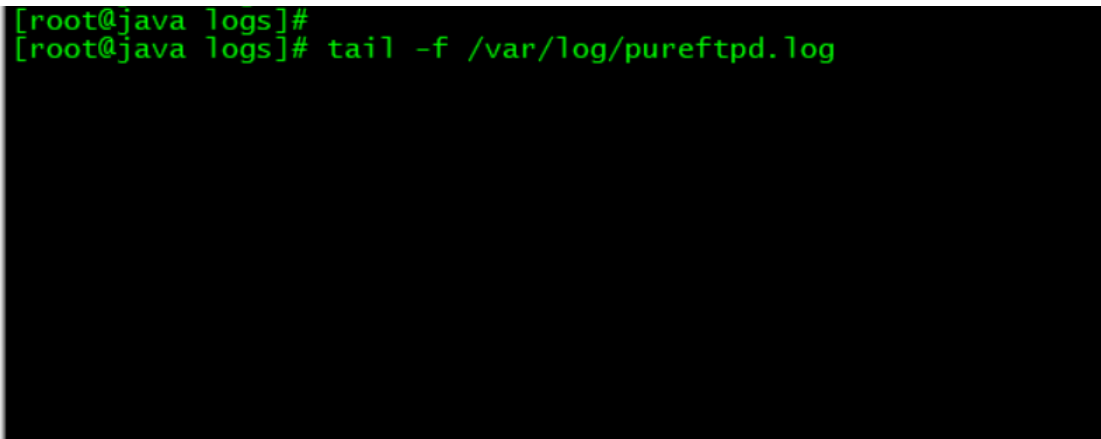
```
tail -f php-fpm.log
```



```
[root@lnmp log]# pwd
/usr/local/php/var/log
[root@lnmp log]# tail -f php-fpm.log
```

Pure-Ftpd:

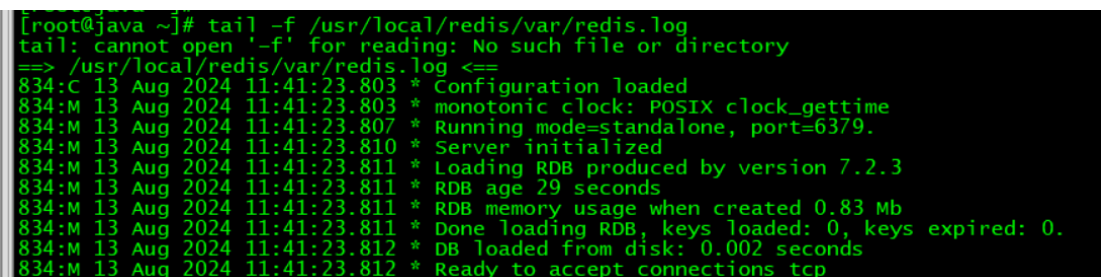
```
tail -f /var/log/pureftpd.log
```



```
[root@java logs]#
[root@java logs]# tail -f /var/log/pureftpd.log
```

Redis:

```
tail -f /usr/local/redis/var/redis.log
```



```
[root@java ~]# tail -f /usr/local/redis/var/redis.log
tail: cannot open '-f' for reading: No such file or directory
==> /usr/local/redis/var/redis.log <==
834:C 13 Aug 2024 11:41:23.803 * Configuration loaded
834:M 13 Aug 2024 11:41:23.803 * monotonic clock: POSIX clock_gettime
834:M 13 Aug 2024 11:41:23.807 * Running mode=standalone, port=6379.
834:M 13 Aug 2024 11:41:23.810 * Server initialized
834:M 13 Aug 2024 11:41:23.811 * Loading RDB produced by version 7.2.3
834:M 13 Aug 2024 11:41:23.811 * RDB age 29 seconds
834:M 13 Aug 2024 11:41:23.811 * RDB memory usage when created 0.83 Mb
834:M 13 Aug 2024 11:41:23.811 * Done loading RDB, keys loaded: 0, keys expired: 0.
834:M 13 Aug 2024 11:41:23.812 * DB loaded from disk: 0.002 seconds
834:M 13 Aug 2024 11:41:23.812 * Ready to accept connections tcp
```



Memcached:

无日志输出

最后查看操作系统日志/var/log/messages

```
[root@java ~]#
[root@java ~]# tail -f /var/log/messages
Aug 13 14:00:06 java systemd[1]: Started system activity accounting tool.
Aug 13 14:10:06 java systemd[1]: Starting system activity accounting tool...
Aug 13 14:10:06 java systemd[1]: sysstat-collect.service: Succeeded.
Aug 13 14:10:06 java systemd[1]: Started system activity accounting tool.
Aug 13 14:20:49 java systemd[1]: Starting system activity accounting tool...
Aug 13 14:20:49 java systemd[1]: sysstat-collect.service: Succeeded.
Aug 13 14:20:49 java systemd[1]: Started system activity accounting tool.
Aug 13 14:30:06 java systemd[1]: Starting system activity accounting tool...
Aug 13 14:30:06 java systemd[1]: sysstat-collect.service: Succeeded.
Aug 13 14:30:06 java systemd[1]: Started system activity accounting tool.
```

## 7、oneinstack 官方手册

<https://oneinstack.com/docs/lnmp>

浏览器输入链接信息。



官方手册内容收录内容如下:

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关于php缓存opcache

关于网站根目录权限

关于redis、memcached

关于iptables防火墙

## 三、技术支持

### 1、售后服务

- (1) 您可以第一时间在阿里云市场联系售后获取服务。
- (2) 服务时间：09:00-18:00（紧急情况请打电话）
- (3) 服务热线：18091296777、4009030002 转 15953
- (4) 服务邮箱：[22958288@qq.com](mailto:22958288@qq.com)

### 2、服务范围

**远程支持：**如果您在使用过程中遇到技术操作问题，请及时联系客服，我们的工程师可远程协助您完成操作。

**定制服务：**本公司支持一对一定制服务，如您的业务环境有特殊需求，请与客服联系。

**付费服务：**本公司可提供镜像部署、故障处理、安全运维代维等一站式托管服务，全面涵盖服务器环境配置，网站程序调试，数据库配置更改，数据库权限、账户，系统安全加固，故障排查，系统调优，数据库优化等范围。如您有相关需求，请咨询客服。