

1.分布式实战（一）

基于四台服务器实现LNMP分离部署，A服务器部署nginx,B/C服务器部署MySQL主从,D服务器部署php。

实战环境

```
A服务器(nginx): 192.168.222.129
B服务器(master): 192.168.222.130
C服务器(slave): 192.168.222.131
D服务器/php): 192.168.222.132
```

网站一

2.部署流程

2.1预编译

```
cd /usr/src
wget http://nginx.org/download/nginx-1.16.1.tar.gz
tar xf nginx-1.16.1.tar.gz
cd nginx-1.16.1/
./configure --prefix=/usr/local/nginx --with-http_stub_status_module
```

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2.2编译与安装

```
make && make install
```

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```
修改nginx进程用户为nginx:
[root@localhost]# grep "^user" /usr/local/nginx/conf/nginx.conf
```

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2.3启动nginx

```
[root@localhost ~]# /usr/local/nginx/sbin/nginx
```

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2.4修改nginx配置文件

```
location / {
    # 指定wordpress网站代码路径
    root /usr/share/nginx/html/wordpress;
```

```

        index index.php index.html index.htm;
    }
    # 省略部分信息
    ...
    location ~ /\.php$ {
        #指定php-fpm远程服务器上wordpress代码路径
        root /data/wordpress;
        # 指定php-fpm远程服务器ip
        fastcgi_pass 192.168.222.132:9000;
        fastcgi_index index.php;
        fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;
        include fastcgi_params;
    }
    server {
        listen 80;
        server_name blog.wordpress.com;
        charset utf-8;
        #access_log logs/wordpress.access.log main;
        location / {
            root html/wordpress;
            index index.php index.html index.htm;
        }
        #error_page 404 /404.html;
        # redirect server error pages to the static page /50x.html
        #
        error_page 500 502 503 504 /50x.html;
        location = /50x.html {
            root html;
        }
        location ~ /\.php$ {
            root /data/wordpress;
            fastcgi_pass 192.168.222.132:9000;
            fastcgi_index index.php;
            fastcgi_param SCRIPT_FILENAME
$document_root$fastcgi_script_name;
            include fastcgi_params;
        }
    }
}

```

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3.安装PHP

3.1安装依赖

```

yum -y install gd curl curl-devel libjpeg libjpeg-devel libpng libpng-
devel freetype freetype-devel libxml2 libxml2-devel

```

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3.2预编译

```

# 解压包
tar xf php-5.6.8.tar.bz2
cd php-5.6.8

```



```
./configure --prefix=/usr/local/php \
--enable-fpm \
--enable-debug \
--with-gd \
--with-jpeg-dir \
--with-png-dir \
--with-freetype-dir \
--enable-mbstring \
--with-curl \
--with-mysql=mysqlnd \
--with-mysqli=mysqlnd \
--with-pdo-mysql=mysqlnd \
--with-config-file-path=/usr/local/php/etc \
--with-zlib-dir
```

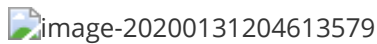


3.3编译/安装

```
make && make install
```



```
cp php.ini-development /usr/local/php/etc/php.ini
cp /usr/local/php/etc/php-fpm.conf.default /usr/local/php/etc/php-fpm.conf
cp sapi/fpm/init.d.php-fpm /etc/init.d/php-fpm
chmod +x /etc/init.d/php-fpm
```



```
# 修改php-fpm的用户为nginx:
# egrep "(user|group)" /usr/local/php/etc/php-fpm.conf
user = nginx
group = nginx
# 启动php-fpm:
/etc/init.d/php-fpm start
```



3.5 修改php-fpm配置文件

```
[root@localhost php-5.6.8]# egrep "(listen|user|group)" /usr/local/php/etc/php-fpm.conf
user = nginx
group = nginx
listen = 192.168.222.129:9000
listen.allowed_clients = 192.168.222.129
```



```
# 查看进程/端口
[root@localhost etc]# netstat -nlt | grep 9000
tcp        0      0 192.168.222.132:9000  0.0.0.0:*          LISTEN
121232/php-fpm: mas
[root@localhost etc]# ps -ef | grep php
root      121232      1  0 13:10 ?                00:00:00 php-fpm: master process
(/usr/local/php/etc/php-fpm.conf)
nginx     121233 121232  0 13:10 ?                00:00:00 php-fpm: pool www
nginx     121234 121232  0 13:10 ?                00:00:00 php-fpm: pool www
root      121242   9418  0 13:15 pts/0          00:00:00 grep --color=auto php
```

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4.MySQ主从

4.1 配置master端

```
# 为两个主机安装mariadb/mariadb-server:
yum install mariadb mariadb-server -y
```

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```
# 修改配置文件 (/etc/my.cnf)，在[mysqld]字段下添加以下内容:
log-bin=jfedu-bin
server-id=1
```

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```
# 重启服务:
systemctl restart mariadb
# 通过mysql进入mysql服务器，查看二进制功能状态:
MariaDB [(none)]> show variables like "%log_bin";
+-----+-----+
| variable_name | value |
+-----+-----+
| log_bin       | ON    |
| sql_log_bin   | ON    |
+-----+-----+
2 rows in set (0.00 sec)
```

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```
# 授权从库:
MariaDB [(none)]> grant replication slave on *.* to "jfedu"@"192.168.222.131"
identified by "123456";
Query OK, 0 rows affected (0.04 sec)
MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.00 sec)
```

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4.2 查看master端状态

```
MariaDB [(none)]> show master status;
```

File	Position	Binlog_Do_DB	Binlog_Ignore_DB
jfedu-bin.000004	552		

1 row in set (0.01 sec)

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4.3 配置slave端

```
# 修改配置文件 (/etc/my.cnf)，在[mysqld]字段下添加以下内容：  
server-id=2
```

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 image-20200208131328953

```
# 重启服务：  
systemctl restart mariadb  
# 指定主库：  
MariaDB [(none)]> change master to master_host="192.168.222.130",  
master_user="jfedu", master_password="123456", master_log_file="jfedu-  
bin.000004", master_log_pos=552;
```

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4.4 启动slave进程

```
MariaDB [(none)]> slave start;
```

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4.5 查看同步-状态

```
MariaDB [(none)]> show slave status\G  
***** 1. row *****  
Slave_IO_State: Waiting for master to send event  
Master_Host: 192.168.222.130  
Master_User: jfedu  
Master_Port: 3306  
Connect_Retry: 60  
Master_Log_File: jfedu-bin.000004  
Read_Master_Log_Pos: 552  
Relay_Log_File: mariadb-relay-bin.000002  
Relay_Log_Pos: 529  
Relay_Master_Log_File: jfedu-bin.000004  
Slave_IO_Running: Yes  
Slave_SQL_Running: Yes  
Replicate_Do_DB:  
Replicate_Ignore_DB:  
Replicate_Do_Table:  
Replicate_Ignore_Table:  
Replicate_Wild_Do_Table:
```

Replicate_wild_Ignore_Table:

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5部署网站

授权和部署

```
[root@localhost src]# mkdir -p /usr/local/nginx/html/wordpress
[root@localhost src]# tar -xf /usr/src/wordpress-4.9.4-zh_CN.tar.gz -C
/usr/local/nginx/html/wordpress
[root@localhost src]# rsync -av /usr/local/nginx/html/wordpress/
192.168.222.132:/data/
```

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```
[root@localhost ~]# chown nginx. -R /data/wordpress
```

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 image-20200219131301745

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 image-20200219131543359

网站二


配置location


```
server {
    listen 80;
    server_name bbs.discuz.com;
    charset utf-8;
    #access_log logs/discuz.access.log main;
    location / {
        root html/discuz/upload;
        index index.php index.html index.htm;
    }
    #error_page 404 /404.html;
    ##redirect server error pages to the static page /50x.html
    ##
    #error_page 500 502 503 504 /50x.html;
    location = /50x.html {
        root html;
    }
    location ~ /\.php$ {
        root /data/discuz/upload;
        fastcgi_pass 192.168.222.132:9000;
        fastcgi_index
index.php;
        fastcgi_param SCRIPT_FILENAME
$document_root$fastcgi_script_name;
        include fastcgi_params;
    }
}
```

```
}  
}
```

部署网站

```
[root@localhost src]# unzip Discuz_X3.1_SC_UTF8.zip -d  
/usr/local/nginx/html/discuz  
[root@localhost src]# rsync -av /usr/local/nginx/html/discuz  
192.168.222.132:/data/  
[root@localhost ~]# chown nginx. -R /data/discuz/
```

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授权

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image-20200219124841741

image-20200219124859286

image-20200219124954364

image-20200219125023905

网站三

```
[root@localhost src]# tar xf phpMyAdmin-4.9.2-all-languages.tar.gz -C  
/usr/local/nginx/html/
```

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