

1. 环境软件版本

环境: 软件	版本
虚拟机: VirtualBox	6.1
服务器: CentOS	7.8
远程连接: ZenTermLite	4.1.0

2. Linux下 FastDFS+GraphicsMagick+Nginx+Lua安装

1.安装编译环境

yum install git gcc gcc-c++ make automake vim wget libevent -y

2.安装libfastcommon基础库

```
mkdir /root/fastdfs
cd /root/fastdfs
git clone https://github.com/happyfish100/libfastcommon.git --depth 1 cd
libfastcommon/
./make.sh && ./make.sh install
```

3.安装FastDFS

```
cd /root/fastdfs
wget https://github.com/happyfish100/fastdfs/archive/V5.11.tar.gz tar -zxvf
V5.11.tar.gz
cd fastdfs-5.11
./make.sh && ./make.sh install
#配置文件准备
cp /etc/fdfs/tracker.conf.sample /etc/fdfs/tracker.conf
cp /etc/fdfs/storage.conf.sample /etc/fdfs/storage.conf
cp /etc/fdfs/client.conf.sample /etc/fdfs/client.conf
cp /root/fastdfs/fastdfs-5.11/conf/http.conf /etc/fdfs
cp /root/fastdfs/fastdfs-5.11/conf/mime.types /etc/fdfs
```

```
vim /etc/fdfs/tracker.conf
#需要修改的内容如下
port=22122
base_path=/home/fastdfs
```

```
vim /etc/fdfs/storage.conf
#需要修改的内容如下
port=23000
base_path=/home/fastdfs # 数据和日志文件存储根目录
store_path0=/home/fastdfs # 第一个存储目录
tracker_server=192.168.56.100:22122 #虚拟机ip
# http访问文件的端口(默认8888,看情况修改,和nginx中保持一致)
http.server_port=8888
```

4.启动

```
mkdir /home/fastdfs -p
/usr/bin/fdfs_trackerd /etc/fdfs/tracker.conf restart
/usr/bin/fdfs_storaged /etc/fdfs/storage.conf restart
查看所有运行的端口
netstat -ntlp
```

5.测试上传

```
vim /etc/fdfs/client.conf
#需要修改的内容如下
base_path=/home/fastdfs
#tracker服务器IP和端口
tracker_server=192.168.56.100:22122
#保存后测试,返回ID表示成功 如:group1/M00/00/00/xxx.png
/usr/bin/fdfs_upload_file /etc/fdfs/client.conf /root/fastdfs/philippines.jpg
group1/M00/00/00/wKg4ZF9bn5SAbZIIAFXPn_2NEk685.jpg
```

6.安装fastdfs-nginx-module

```
cd /root/fastdfs
wget https://github.com/happyfish100/fastdfs-nginx-module/archive/V1.20.tar.gz
解压
tar -xvf V1.20.tar.gz
cd fastdfs-nginx-module-1.20/src
vim config
修改第5行 和15行 修改成
ngx_module_incs="/usr/include/fastdfs /usr/include/fastcommon/"
CORE_INCS="$CORE_INCS /usr/include/fastdfs /usr/include/fastcommon/"
```

```
cp mod_fastdfs.conf /etc/fdfs/
```

```
vim /etc/fdfs/mod_fastdfs.conf
#需要修改的内容如下
tracker_server=192.168.56.100:22122 #虚拟机ip
url_have_group_name=true
store_path0=/home/fastdfs
```

```
mkdir -p /var/temp/nginx/client
```

7.安装nginx

```
cd /root/fastdfs
wget http://nginx.org/download/nginx-1.15.6.tar.gz
tar -zxvf nginx-1.15.6.tar.gz
cd nginx-1.15.6/
```

```
yum -y install pcre-devel openssl openssl-devel
# 添加fastdfs-nginx-module模块
./configure --add-module=/root/fastdfs/fastdfs-nginx-module-1.20/src
```

编译安装

```
make && make install
查看模块是否安装上
/usr/local/nginx/sbin/nginx -V
```

vim /usr/local/nginx/conf/nginx.conf

```
#添加如下配置
server {
    listen 8888;
    server_name localhost;
    location ~/group[0-9]/ {
        ngx_fastdfs_module;
    }
}
```

```
/usr/local/nginx/sbin/nginx
```

8.测试下载

关闭防火墙

```
systemctl stop firewalld
```

```
http://192.168.56.100:8888/group1/M00/00/00/xxx.png
```

打开浏览器或postman

```
http://192.168.56.100:8888/group1/M00/00/00/wKg4ZF9bn5SAbZIIAFPXpN_2NEk685.jpg
```

9.1 基础软件包安装

```
yum -y install epel-release git
yum install -y gcc gcc-c++ zlib zlib-devel openssl openssl-devel pcre pcre-
devel
yum install -y libpng libjpeg libpng-devel libjpeg-devel ghostscript libtiff
libtiff-devel freetype freetype-devel readline-devel ncurses-devel libtermcap-
devel ncurses-devel libevent-devel
```

9.2 下载相关软件

```
cd /usr/local/src
wget http://luajit.org/download/LuaJIT-2.0.4.tar.gz
wget http://www.zlib.net/fossils/zlib-1.2.8.tar.gz
wget http://www.lua.org/ftp/lua-5.3.1.tar.gz
wget ftp://ftp.graphicsmagick.org/pub/GraphicsMagick/1.3/GraphicsMagick-
1.3.18.tar.gz

yum install git
git clone https://github.com/simpl/nginx_devel_kit.git
git clone https://github.com/openresty/lua-nginx-module.git
git clone https://github.com/simpl/nginx_devel_kit.git
```

9.3 编译安装Lua、GraphicsMagick

```
tar -zxf LuaJIT-2.0.4.tar.gz
tar -zxf zlib-1.2.8.tar.gz
cd LuaJIT-2.0.4
make
make install
export LUAJIT_LIB=/usr/local/lib
export LUAJIT_INC=/usr/local/include/luajit-2.0
ln -s /usr/local/lib/libluajit-5.1.so.2 /lib64/libluajit-5.1.so.2

cd ..
tar -zxvpf lua-5.3.1.tar.gz
cd lua-5.3.1
make linux && make install

cd ..
```

```
tar -zxvpf GraphicsMagick-1.3.18.tar.gz
cd GraphicsMagick-1.3.18
./configure --prefix=/usr/local/GraphicsMagick --enable-shared
make && make install
```

```
# 添加lua-nginx-module, ngx_devel_kit, fastdfs-nginx-module模块
./configure --add-module=/usr/local/src/lua-nginx-module --add-
module=/usr/local/src/ngx_devel_kit

make
# Verify that the expected image formats are supported by executing
gm convert -list formats
```

9.3 替换nginx二进制文件,在nginx源码目录下执行以下命令

```
cp /usr/local/nginx/sbin/nginx /usr/local/nginx/sbin/nginx.bak
cp ./objs/nginx /usr/local/nginx/sbin/
```

9.4 修改nginx配置文件

```
server {
    listen 8888;
    server_name localhost;
    location ~/group[0-9]/ {
        ngx_fastdfs_module;
        if (!-f $request_filename) {    # 如果文件不存在时才需要裁剪
            set $width $6;    # 设置裁剪/缩放的宽度
            set $height $7;    # 设置裁剪/缩放的高度
            set $ext $5;    # 图片文件格式后缀
            content_by_lua_file lua/ImageResizer.lua;    # 加载外部 Lua 文件
        }
    }
}
```

9.5 创建lua脚本

vi /usr/local/nginx/lua/ImageResizer.lua

```
local command = "/usr/local/GraphicsMagick/bin/gm convert -auto-orient -
strip " .. ngx.var.request_filepath .. " -resize " .. ngx.var.width .. "x" ..
ngx.var.height .. " +profile \"*\ " .. ngx.var.request_filepath .. "_" ..
ngx.var.width .. "x" .. ngx.var.height .. "." .. ngx.var.ext;
os.execute(command);
ngx.exec(ngx.var.request_uri);
```

10. 测试

通过命令重新加载Nginx配置文件

```
/usr/local/nginx/sbin/nginx -s reload
```

访问以下连接:

http://192.168.56.100:8888/group1/M00/00/00/wKg4ZF9bn5SAbZIIAFPXpN_2NEk685_100x100.jpg