一、环境

```
linux: centos-release-7-5.1804.el7.centos.x86_64
fastdfs：group1:192.168.238.160
```

二、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
```

4.修改配置

```
#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
group_name=group1
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=192.168.238.160:22122
# 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
```

5.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
```

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 -zxvf 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=192.168.238.160:22122
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
```

三、测试

1.测试上传

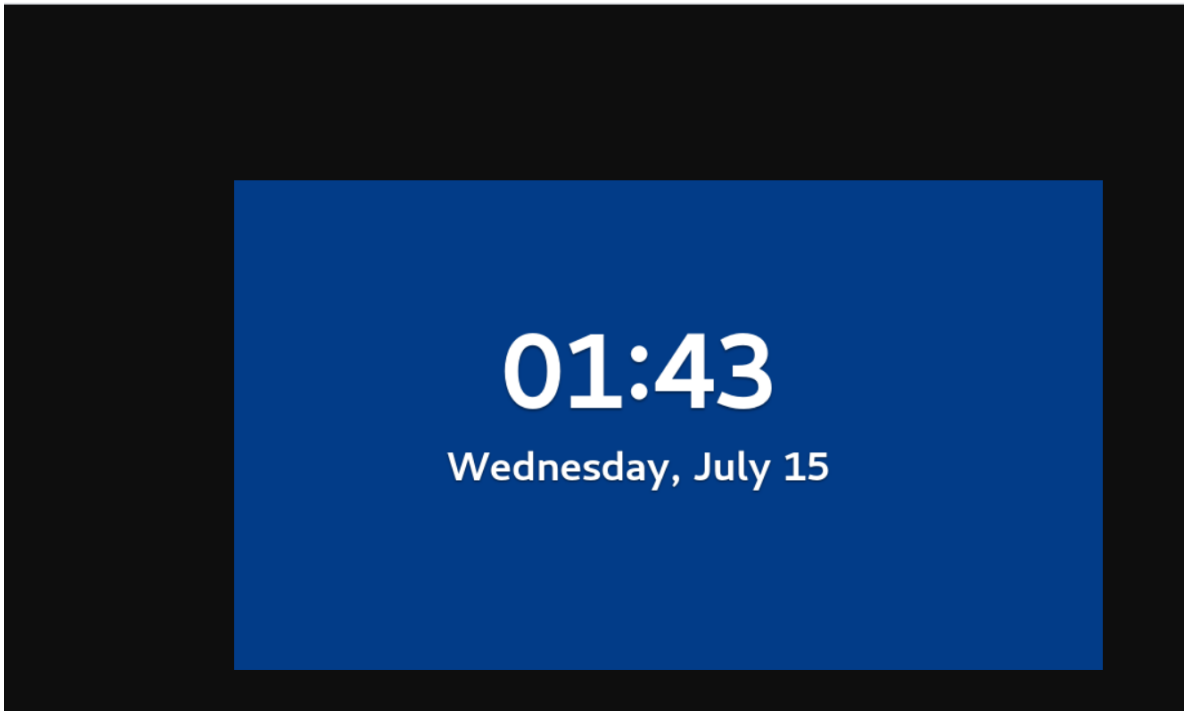
```
vim /etc/fdfs/client.conf
#需要修改的内容如下
base_path=/home/fastdfs
#tracker服务器IP和端口
tracker_server=192.168.238.160:22122
#保存后测试,返回ID表示成功 如：group1/M00/00/00/xxx.png
/usr/bin/fdfs_upload_file /etc/fdfs/client.conf /root/fastdfs/1.png
```

```
[root@localhost logs]# vim /etc/fdfs/client.conf
[root@localhost logs]# /usr/bin/fdfs_upload_file /etc/fdfs/client.conf /root/fastdfs/1.png
group1/M00/00/00/wKjuoF8N73KAWKqOAABDL5pi8X4134.png
```

2.测试http下载

```
http://192.168.238.160:8888/group1/M00/00/00/wKjuoF8N73KAWKqOAABDL5pi8X4134.png
```

全 | 192.168.238.160:8888/group1/M00/00/00/wKjuoF8N73KAWKqOAABDL5pi8X4134.png



四、GraphicsMagick生成缩略图

1.编译安装-LuaJIT

```
wget http://luajit.org/download/LuaJIT-2.0.4.tar.gz
tar -zxvf LuaJIT-2.0.4.tar.gz
mv LuaJIT-2.0.4 /usr/local
cd /usr/local/LuaJIT-2.0.4/
make && make install
```

```
vim /etc/profile
export LUAJIT_LIB=/usr/local/lib
export LUAJIT_INC=/usr/local/include/luajit-2.0
source /etc/profile
```

```
ln -s /usr/local/lib/libluajit-5.1.so.2 /lib64/libluajit-5.1.so.2
```

2.编译安装-Lua

```
wget http://www.lua.org/ftp/lua-5.3.3.tar.gz
tar -zxvf lua-5.3.3.tar.gz
mv lua-5.3.3 /usr/local
cd /usr/local/lua-5.3.3/
make linux && make install
```

3.编译安装-GraphicsMagick

```
#安装graphicsmagick支持的图片格式
yum install libjpeg libjpeg-devel libpng libpng-devel giflib giflib-devel
freetype freetype-devel -y
```

```
##安装-GraphicsMagick
wget
https://sourceforge.net/projects/graphicsmagick/files/graphicsmagick/1.3.35/Grap
hicsMagick-1.3.35.tar.gz
tar -zxvf GraphicsMagick-1.3.35.tar.gz
cd GraphicsMagick-1.3.35/
./configure --prefix=/usr/local/GraphicsMagick --enable-shared
make && make install
```

```
/usr/local/GraphicsMagick/bin/gm version
```

4.编译安装-nginx

```
#先查看nginx编译安装时安装了哪些模块
/usr/local/nginx/sbin/nginx -V

nginx version: nginx/1.15.6
built by gcc 4.8.5 20150623 (Red Hat 4.8.5-39) (GCC)
configure arguments: --add-module=/root/fastdfs/fastdfs-nginx-module-1.20/src
```

```
mv ngx_devel_kit/ /usr/local
tar -zxvf zlib-1.2.11.tar.gz
mv zlib-1.2.11 /usr/local
tar -zxvf v0.10.9rc7.tar.gz
mv lua-nginx-module-0.10.9rc7/ /usr/local
```

```
#在nginx的源码目录下，通过–add-module=xxx的方式，追加模块
./configure --add-module=/root/fastdfs/fastdfs-nginx-module-1.20/src --
prefix=/usr/local/nginx --with-zlib=/usr/local/zlib-1.2.11 --add-
module=/usr/local/lua-nginx-module-0.10.9rc7 --add-
module=/usr/local/ngx_devel_kit

make && make install
/usr/local/nginx/sbin/nginx -V
```

5.nginx配置

```
##从github上下载lua脚本nginx-lua-fastdfs-GraphicsMagick
git clone https://github.com/hpxl/nginx-lua-fastdfs-GraphicsMagick.git
cd nginx-lua-fastdfs-GraphicsMagick/lua
cp ./* /usr/local/nginx/conf/lua

#修改脚本中的tracker ip信息和gm的命令变量
vim /usr/local/nginx/conf/lua/fastdfs.lua

fdfs:set_tracker("192.168.238.160", 22122)
local command = "/usr/local/GraphicsMagick/bin/gm convert "
```

```
[root@localhost lua]# vim fastdfs.lua

    local fdfs = fastdfs:new()
    fdfs:set_tracker("192.168.238.160", 22122)
    fdfs:set_timeout(1000)
    fdfs:set_tracker_keepalive(0, 100)
    fdfs:set_storage_keepalive(0, 100)
    local data = fdfs:do_download(fileid)
    if data then
       -- check image dir
        if not is_dir(ngx.var.image_dir) then
            os.execute("mkdir -p " .. ngx.var.image_dir)
        end
        writefile(originalFile, data)
    end
end

-- 创建缩略图
local image_sizes = {"80x80", "800x600", "40x40", "60x60"};
function table.contains(table, element)
    for _, value in pairs(table) do
        if value == element then
            return true
        end
    end
    return false
end

if table.contains(image_sizes, area) then
    local command = "/usr/local/GraphicsMagick/bin/gm convert " .  originalFile  .. " -thumbn
    os.execute(command);
end;
```

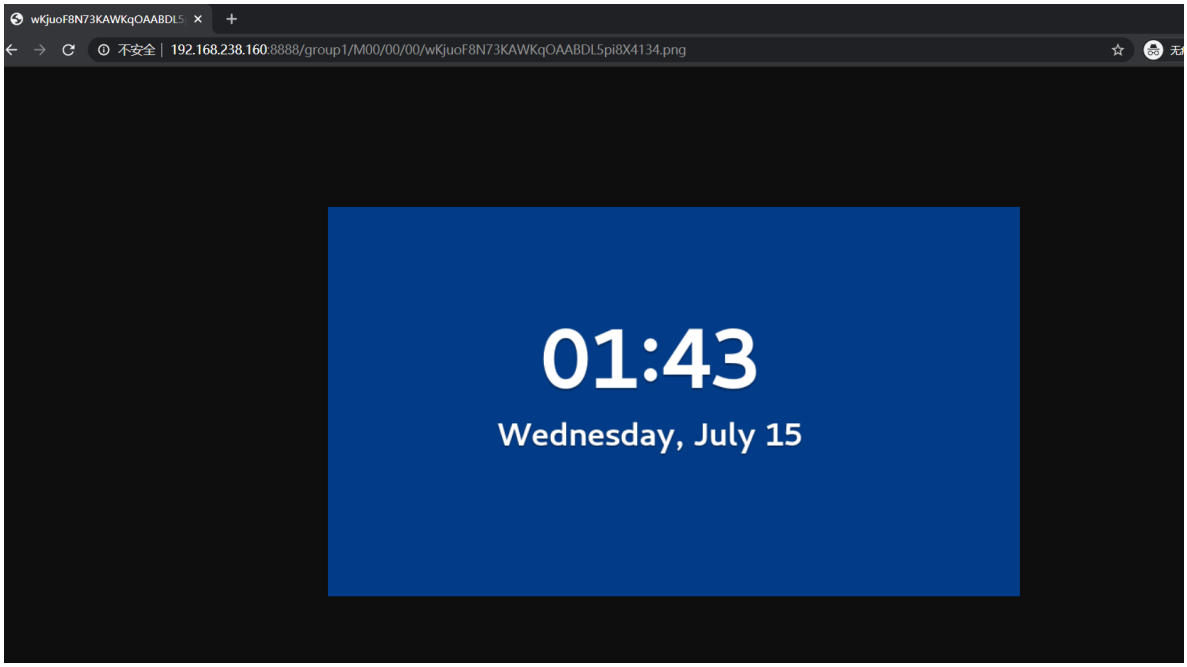
```
#修改nginx配置
vim /usr/local/nginx/conf/nginx.conf

server {
    listen       8888;
    server_name  localhost;

    location /lua {
        default_type 'text/plain';
        content_by_lua 'ngx.say("Hello, Lua!")';
    }

    location /group1/M00 {
        alias /home/fastdfs/data;

        set $image_root "/home/fastdfs/data";
        if ($uri ~ "/([a-zA-Z0-9]+)/([a-zA-Z0-9]+)/([a-zA-Z0-9]+)/([a-zA-Z0-
9]+)/(.*)") {
            set $image_dir "$image_root/$3/$4/";
            set $image_name "$5";
            set $file "$image_dir$image_name";
        }

        if (!-f $file) {
            # 关闭lua代码缓存，方便调试lua脚本
            #lua_code_cache off;
            content_by_lua_file "/usr/local/nginx/conf/lua/fastdfs.lua";
        }
        ngx_fastdfs_module;
    }

}
```

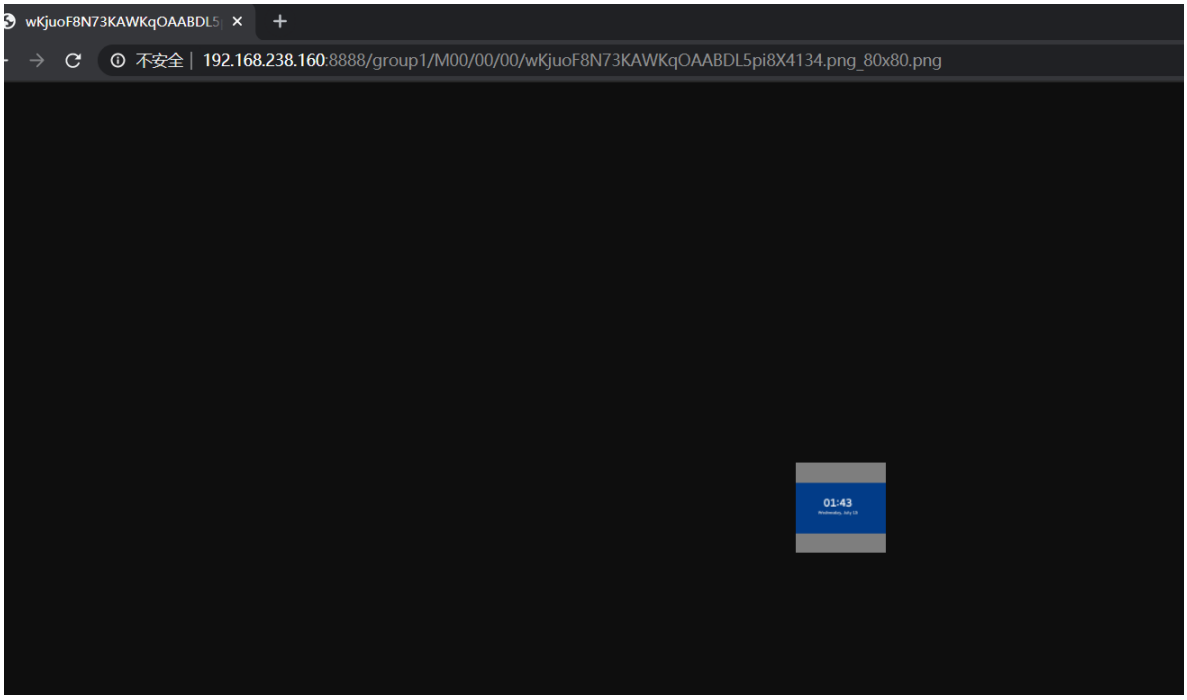
```
chmod -R 777 /home/fastdfs/data/
```

```
/usr/local/nginx/sbin/nginx -s reload
##访问测试
http://192.168.238.160:8888/lua
```

Hello, Lua!

```
http://192.168.238.160:8888/group1/M00/00/00/wKjuoF8N73KAWKqOAABDL5pi8X4134.png
http://192.168.238.160:8888/group1/M00/00/00/wKjuoF8N73KAWKqOAABDL5pi8X4134.png_80x80.png
```






```
[root@localhost conf]# /usr/bin/fdfs_upload_file /etc/fdfs/client.conf /root/fastdfs/1.png
group1/M00/00/00/wKjuoF8OpIyAAbbHAABDL5pi8X4809.png
[root@localhost conf]# cd /home/fastdfs/
[root@localhost fastdfs]# ll
total 12
drwxrwxrwx. 259 root root 8192 Jul 15 01:45 data
drwxr-xr-x.   2 root root   46 Jul 15 01:40 logs
[root@localhost fastdfs]# cd data/00/00/
[root@localhost 00]# ll
total 72
-rwxrwxrwx. 1 root   root   17199 Jul 15 01:46 wKjuoF8N73KAWKqOAABDL5pi8X4134.png
-rw-rw-rw-. 1 nobody nobody  1183 Jul 15 14:29 wKjuoF8N73KAWKqOAABDL5pi8X4134.png_80x80.png
-rw-r--r--. 1 root   root   17199 Jul 15 14:39 wKjuoF8OpIyAAbbHAABDL5pi8X4809.png
-rw-rw-rw-. 1 nobody nobody 21795 Jul 15 14:41 wKjuoF8OpIyAAbbHAABDL5pi8X4809.png_800x600.png
-rw-rw-rw-. 1 nobody nobody  1183 Jul 15 14:39 wKjuoF8OpIyAAbbHAABDL5pi8X4809.png_80x80.png
[root@localhost 00]#
```

安装过程遇到的问题

1.编译安装Lua出现：lua.c:80:31: fatal error: readline/readline.h: No such file or directory

解决：

```
yum install readline-devel
```