

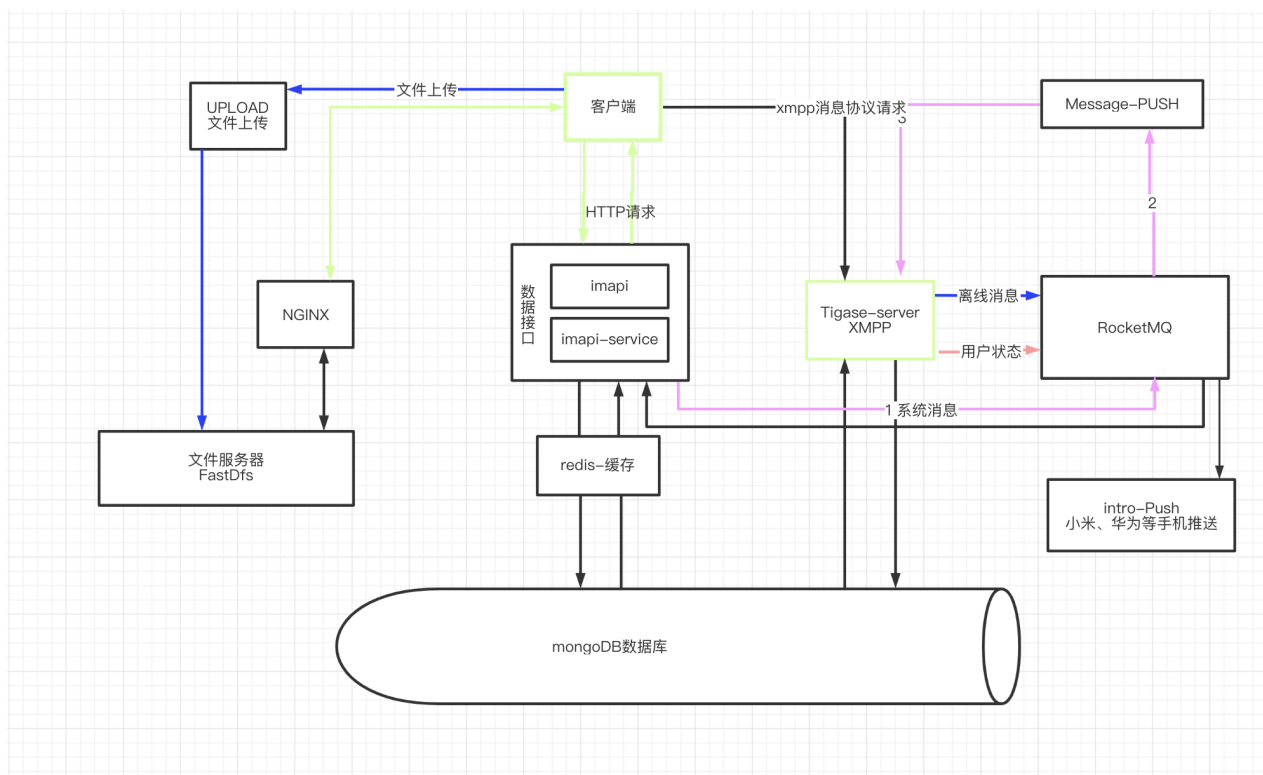
服务端安装部署文档

服务端安装方式分为两种，一是linux上面直接部署，二是使用docker容器化部署方式，安装部署文档涉及到的软件包，都在压缩包soft.zip下，软件包找相关项目负责人获取。

1、端口开放情况

服务	用途	使用端口	说明
Mongodb	数据库	27017	不用对外开放
imapi	Api接口	8092	需要开放
Tigase-server	通讯服务	Web端使用5260端口，手机端使用5666端口	需要开放
Upload	文件上传	8088	需要开放
Nginx	静态文件访问	8080	需要开放
Redis	缓存	6379	不用对外开放

2、产品架构图



一、Linux 直接安装

软件包跟目录放在/opt 下

1、源码安装mongodb

1.1 解压源码

```
[root@mac-pro~]# cd /opt
[root@mac-pro~]# mv /soft/mongodb-linux-x86_64-3.4.0.tgz ./
[root@mac-pro~]# tar -zxvf mongodb-linux-x86_64-3.4.0.tgz
[root@mac-pro~]# mv mongodb-linux-x86_64-3.4.0 mongodb-3.4.0
```

1.2 在/opt/mongodb-3.4.0目录下创建mongo.conf文件内容如下：

```
[root@mac-pro~]# cd mongodb-3.4.0
[root@mac-pro~]# vim mongo.conf
#录入以下内容
systemLog:
  destination: file
  path: "/opt/mongodb-3.4.0/logs/mongodb.log"
  logAppend: true
storage:
  dbPath: "/data/mongodb"
  journal:
    enabled: true
  mmapv1:
    smallFiles: true
  wiredTiger:
    engineConfig:
      configString: cache_size=1G
processManagement:
  fork: true
net:
  # bindIp: 127.0.0.1
  port: 27017
setParameter:
  enableLocalhostAuthBypass: false
```

1.3 然后创建mongodb数据目录，和日志目录

```
[root@mac-pro~]# mkdir -p /data/mongodb
[root@mac-pro~]# mkdir logs
```

1.4在/opt/mongodb-3.4.0目录下创建start启动脚本内容如下:

```
/opt/mongodb-3.4.0/bin/mongod --config=/opt/mongodb-3.4.0/mongo.conf
```

执行start脚本, 出现如下图所示内容则启动成功

```
[root@www mongodb-linux-x86_64-3.0.1]# sh start
about to fork child process, waiting until server is ready for connections.
forked process: 23638
child process started successfully, parent exiting
```

Stop脚本:

```
ps -ef|grep mongo.conf|grep -v grep|awk '{printf $2}'|xargs kill -9
```

2、安装Redis

2.1 解压、安装

```
[root@mac-pro~]# cd /opt
[root@mac-pro~]# tar -zxvf redis-4.0.1.tar.gz
[root@mac-pro~]# cd redis-4.0.1
[root@mac-pro~]# make && make install
```

2.2 修改/opt/redis-4.0.1目录下redis.conf文件中配置项:

daemonize yes (进程后台运行)

2.3 在/opt/redis-4.0.1目录下创建start启动脚本内容如下:

```
/opt/redis-4.0.1/src/redis-server /opt/redis-4.0.1/redis.conf
```

2.4 执行sh start 命令启动脚本, 查看redis是否启动成功

```
[root@www redis-2.8.19]# sh start
[root@www redis-2.8.19]# ps -ef|grep redis
root      8346      1  0 17:32 ?        00:00:00 /usr/local/redis-2.8.19/src/redis-server *:6380
root      8374    6564  0 17:33 pts/0    00:00:00 grep redis
root      11105     1  0 Jul09 ?        00:12:35 /usr/local/redis-2.8.12/src/redis-server *:6379
[root@www redis-2.8.19]#
```

2.5 Stop脚本

```
ps -ef|grep /opt/redis-4.0.1/src/redis-server|grep -v grep|awk '{printf $2}'|xargs
kill -9
ps -ef|grep /opt/redis-4.0.1/src/redis-server
```

3、安装Jdk1.8+

```
[root@mac-pro~]# cd /opt
[root@mac-pro~]# tar -zxvf jdk-8u131-linux-x64.tar.gz
[root@mac-pro~]# mkdir java
[root@mac-pro~]# mv jdk1.8.0_131 ./java
```

3.1 设置jdk环境变量

这里采用全局设置方法，就是修改etc/profile，它是所有用户的共用的环境变量

```
[root@mac-pro~]# vim /etc/profile
```

打开之后在末尾添加

```
JAVA_HOME=/opt/java/jdk1.8.0_131
JRE_HOME=/opt/java/jdk1.8.0_131/jre
CLASSPATH=.:$JAVA_HOME/lib/dt.jar:$JAVA_HOME/lib/tools.jar:$JRE_HOME/lib
PATH=$JAVA_HOME/bin:$PATH
export PATH JAVA_HOME CLASSPATH
```

3.2 使环境变量生效

```
[root@mac-pro~]# source /etc/profile
```

3.3 检验是否安装成功

在终端执行：`java -version` 命令，看看是否安装成功，成功则显示如下：

```
java version "1.8.0_131"
Java(TM) SE Runtime Environment (build 1.8.0_131-b17)
Java HotSpot(TM) 64-Bit Server VM (build 25.65-b01, mixed mode)
```

```
[root@www nginx]# java -version
java version "1.8.0_05"
Java(TM) SE Runtime Environment (build 1.8.0_05-b13)
Java HotSpot(TM) 64-Bit Server VM (build 25.5-b02, mixed mode)
```

3.4 可能出现的问题：

若出现

```
bash: /usr/bin/java: /lib/ld-linux.so.2: bad ELF interpreter: No such file or directory
```

执行：`sudo yum install glibc.i686` 命令安装glibc

4、安装Rocket MQ 队列

4.1 解压源码

```
[root@mac-pro~]# cd /opt
[root@mac-pro~]# unzip rocketmq-all-4.3.2-bin-release.zip
[root@mac-pro~]# mv rocketmq-all-4.3.2-bin-release rocketmq-4.3.2
[root@mac-pro~]# cd rocketmq-4.3.2
```

4.2 调整rocketMq 的内存值

注意：这里请根据机器的实际情况进行调整，如机器内存较大可适当配置高一点

```
[root@mac-pro~]# vim bin/runbroker.sh
```

```
# JVM Configuration
# =====
JAVA_OPT="{JAVA_OPT} -server -Xms2g -Xmx2g -Xmn1g"
JAVA_OPT="{JAVA_OPT} -XX:+UseG1GC -XX:G1HeapRegionSize=16m -XX:G1ReservePercent=25 -XX:InitiatingHeapOccupancyPercent=30 -XX:SoftRefLRUPolicyMSPerMB=0 -XX:SurvivorRatio=8"
JAVA_OPT="{JAVA_OPT} -verbose:gc -Xloggc:/dev/shm/mq_gc.log -XX:+PrintGCDetails -XX:+PrintGCDateStamps -XX:+PrintGCApplicationStoppedTime -XX:+PrintAdaptiveSizePolicy"
JAVA_OPT="{JAVA_OPT} -XX:+UseGCLogFileRotation -XX:NumberOfGCLogFiles=5 -XX:GCLogFileSize=30m"
JAVA_OPT="{JAVA_OPT} -XX:-OmitStackTraceInFastThrow"
JAVA_OPT="{JAVA_OPT} -XX:+AlwaysPreTouch"
JAVA_OPT="{JAVA_OPT} -XX:MaxDirectMemorySize=1g"
JAVA_OPT="{JAVA_OPT} -XX:-UseLargePages -XX:-UseBiasedLocking"
JAVA_OPT="{JAVA_OPT} -Djava.ext.dirs=${JAVA_HOME}/jre/lib/ext:${BASE_DIR}/lib"
#JAVA_OPT="{JAVA_OPT} -Xdebug -Xrunjdwp:transport=dt_socket,address=9555,server=y,suspend=n"
JAVA_OPT="{JAVA_OPT} ${JAVA_OPT_EXT}"
JAVA_OPT="{JAVA_OPT} -cp ${CLASSPATH}"
```

```
[root@mac-pro~]# vim bin/runserver.sh
```

```
# JVM Configuration
# =====
JAVA_OPT="{JAVA_OPT} -server -Xms2g -Xmx2g -Xmn1g -XX:MetaspaceSize=128m -XX:MaxMetaspaceSize=320m"
JAVA_OPT="{JAVA_OPT} -XX:+UseConcMarkSweepGC -XX:+UseCMSCompactAtFullCollection -XX:CMSInitiatingOccupancyFraction=70 -XX:+CMSParallelRemarkEnabled -XX:SoftRefLRUPolicyMSPerMB=0 -XX:+CMSClassUnloadingEnabled -XX:SurvivorRatio=8 -XX:-UseParNewGC"
JAVA_OPT="{JAVA_OPT} -verbose:gc -Xloggc:/dev/shm/rmq_srv_gc.log -XX:+PrintGCDetails"
JAVA_OPT="{JAVA_OPT} -XX:-OmitStackTraceInFastThrow"
JAVA_OPT="{JAVA_OPT} -XX:-UseLargePages"
JAVA_OPT="{JAVA_OPT} -Djava.ext.dirs=${JAVA_HOME}/jre/lib/ext:${BASE_DIR}/lib"
#JAVA_OPT="{JAVA_OPT} -Xdebug -Xrunjdwp:transport=dt_socket,address=9555,server=y,suspend=n"
```

4.3 执行编写启动脚本 startSrv 并启动nameServer

```
[root@mac-pro~]# vim startSrv
```

写入如下内容：

```
nohup sh ./bin/mqnamesrv > ./logs/rocketmqlogs/namesrv.log &
tail -f ./logs/rocketmqlogs/namesrv.log
```

```
sh startSrv
```

```
[root@localhost rocketmq-all-4.3.2-bin-release]# sh startSrv
Java HotSpot(TM) 64-Bit Server VM warning: Using the DefNew young collector with the CMS collector is deprecated and will likely be removed in a future release.
Java HotSpot(TM) 64-Bit Server VM warning: UseCMSCompactAtFullCollection is deprecated and will likely be removed in a future release.
Java HotSpot(TM) 64-Bit Server VM warning: MaxNewSize (2097152k) is equal to or greater than the entire heap (2097152k). A new max generation size of 2097088k will be used.
The Name Server boot success, serializeType=JSON
tail: nohup: 重定向标准错误到标准输出
./logs/rocketmqlogs/namesrv.log: 文件已截断
Java HotSpot(TM) 64-Bit Server VM warning: Using the DefNew young collector with the CMS collector is deprecated and will likely be removed in a future release.
Java HotSpot(TM) 64-Bit Server VM warning: UseCMSCompactAtFullCollection is deprecated and will likely be removed in a future release.
Java HotSpot(TM) 64-Bit Server VM warning: MaxNewSize (2097152k) is equal to or greater than the entire heap (2097152k). A new max generation size of 2097088k will be used.
The Name Server boot success, serializeType=JSON
```

4.4 执行编写启动脚本 startBroker 并启动Broker

```
vim startBroker
```

写入如下内容：

```
nohup sh bin/mqbroker -n localhost:9876 > ./logs/rocketmqlogs/broker.log &
tail -f ./logs/rocketmqlogs/broker.log
```

执行startBroker脚本启动broker

```
sh startBroker
```

```
[root@localhost rocketmq-all-4.3.2-bin-release]# sh startBroker
[root@localhost rocketmq-all-4.3.2-bin-release]# nohup: 重定向标准错误到标准输出

[root@localhost rocketmq-all-4.3.2-bin-release]#
[root@localhost rocketmq-all-4.3.2-bin-release]#
[root@localhost rocketmq-all-4.3.2-bin-release]#
[root@localhost rocketmq-all-4.3.2-bin-release]#
[root@localhost rocketmq-all-4.3.2-bin-release]# ls
benchmark bin conf hs_err_pid12616.log hs_err_pid2664.log init.sh lib LICENSE logs NOTICE README.md replay_pid12616.log replay_pid3432.log startBroker startSrv
[root@localhost rocketmq-all-4.3.2-bin-release]# tail -f logs/rocketmqlogs/
broker.log namesrv.log
[root@localhost rocketmq-all-4.3.2-bin-release]# tail -f logs/rocketmqlogs/broker.log
The broker[localhost,localdomain, 172.18.1.232:10911] boot success, serializeType=JSON and name server is localhost:9876
```

执行jps 命令 查看正常应该能看到NamesrvStaup 和 BrokerStartup

```
[root@localhost rocketmq-all-4.3.2-bin-release]# jps
19909 BrokerStartup
20117 Jps
19774 NamesrvStartup
```

4.4 注册推送消息、用户状态话题

```
sh bin/mqadmin updateTopic -n localhost:9876 -c DefaultCluster -t pushMessage
sh bin/mqadmin updateTopic -n localhost:9876 -c DefaultCluster -t xmppMessage
sh bin/mqadmin updateTopic -n localhost:9876 -c DefaultCluster -t
userStatusMessage
sh bin/mqadmin updateTopic -n localhost:9876 -c DefaultCluster -t HWPushMessage
sh bin/mqadmin updateTopic -n localhost:9876 -c DefaultCluster -t fullPushMessage
```

附： 单个脚本启动

```
vim vim mqStart
```

写入如下内容：

```
#!/bin/sh
export JAVA_HOME=/opt/java/jdk1.8.0_131/
nohup sh /opt/rocketmq-4.3.2/bin/mqnamesrv > /opt/rocketmq-
4.3.2/logs/rocketmqlogs/namesrv.log 2>&1 &
echo "Start Name Server End"
nohup sh /opt/rocketmq-4.3.2/bin/mqbroker -n localhost:9876 > /opt/rocketmq-
4.3.2/logs/rocketmqlogs/broker.log 2>&1 &
echo "Start Broker End"
```

附： 单个脚本停止

```
vim mqStop
```

```
#!/bin/sh
sh /opt/rocketmq-4.3.2/bin/mqshutdown broker &
sh /opt/rocketmq-4.3.2/bin/mqshutdown namesrv &
echo "Please wait process to exit! check it type jps"
```

附： 停止命令

```
sh bin/mqshutdown namesrv
sh bin/mqshutdown broker
```

5 安装imapi api 接口服务

```
[root@mac-pro~]# cd /opt
[root@mac-pro~]# tar -xvf imapi.tar
[root@mac-pro~]# cd imapi
[root@mac-pro~]# vim application.properties
```

5.1 修改application.properties配置文件

```

1 spring.config.name=application-local
2 spring.config.location=classpath:application-local.properties
3
4 #imapi项目端口
5 server.port=8092
6
7 ##开启https
8 server.openHttps=false
9 #http.port=8092
10 #server.ssl.key-store=classpath:imapi.p12
11 #server.ssl.key-store-password=4bYKAC15
12 #server.ssl.key-store-type=PKCS12
13
14 #设置UTF-8格式
15 #解决程序读配置文件乱码问题
16 spring.messages.encoding=UTF-8
17
18 ###tomcat 请求设置
19 server.max-http-header-size=1048576
20 server.tomcat.max-connections=3000
21 server.tomcat.max-http-post-size=1048576
22 server.tomcat.max-threads=1000
23
24 #Mongodb Properties (数据库配置)
25 im.mongoConfig.uri=127.0.0.1:28018
26 im.mongoConfig.dbName=imapi
27 im.mongoConfig.roomDbName=imRoom
28 im.mongoConfig.username=
29 im.mongoConfig.password=
30 im.mongoConfig.connectTimeout=20000
31 im.mongoConfig.socketTimeout=20000
32 im.mongoConfig.maxWaitTime=20000
33
34
35 ##APP Properties
36 im.appConfig.uploadDomain=http://192.168.0.128:8088
37 im.appConfig.apiKey=
38 im.appConfig.openTask=1
39 im.appConfig.distance=20
- 插入 --

```

数据库连接地址

upload 上传服务连接地址，
这里配置内网地址即可，用于
在imapi里面调用upload 做文
件的复制、删除等操作

可设置为任意字符串，
用于http接口安全验证，各个客户端需要和服务器这里配
置的apikey保持一致

```

49
50 ## SMS Properties(短信配置)
51 im.smsConfig.openSMS=0 ← 0关闭短信, 1开启短信
52 ##天天国际短信
53 im.smsConfig.host=m.isms360.com
54 im.smsConfig.port=8085
55 im.smsConfig.api=/mt/MT3.ashx
56 im.smsConfig.username=username
57 im.smsConfig.password=password
58 im.smsConfig.templateChineseSMS=
59 im.smsConfig.templateEnglishSMS=
60 ## 阿里云短信服务
61 im.smsConfig.product=Dysmsapi
62 im.smsConfig.domain=dysmsapi.aliyuncs.com
63 im.smsConfig.accesskeyid=
64 im.smsConfig.accesskeysecret=
65 im.smsConfig.signname=
66 im.smsConfig.chinese_templatecode=
67 im.smsConfig.english_templatecode=
68
69
70 #XMPP Properties (XMPP主机和端口以及推送用户配置)
71 im.xmppConfig.host=192.168.0.128 ← tigase-server 的连接地址, 这里host 配置为内网
72 im.xmppConfig.serverName= ← ip即可, 注意不能是127.0.0.1
73 im.xmppConfig.port=5222
74 im.xmppConfig.username=10005
75 im.xmppConfig.password=10005
76 im.xmppConfig.dbUri=127.0.0.1:28018 ← serverName 和tigase-server 的virt-host保持一致
77 im.xmppConfig.dbName=tigase
78 im.xmppConfig.dbUsername=
79 im.xmppConfig.dbPassword= ← 数据库地址
80
81 im.mqConfig.nameAddr=127.0.0.1:9876 ← RocketMq 连接地址
82 ##mq 消费最小程数量 默认 cup 数量
83 #im.mqConfig.threadMin=4
84 ##mq 消费最大程数量 默认 cup 数量*2
85 #im.mqConfig.threadMax=8
86 ##mq 批量消费数量 默认 20
87 #im.mqConfig.batchMaxSize=30
-- 插入 --

```

5.2 在imapi目录下执行sh start命令运行imapi接口服务

```
sh start
```

5.3 修改后台配置

启动完成后, 在浏览器打开链接["http://localhost:8092/console/login"](http://localhost:8092/console/login), 出现如下图所示内容即酷信接口部署成功



注：超级管理员账号：1000 初始密码：1000

6 安装tigase-server 通讯服务

6.1 包目录说明

Tigase-Server-聊天服务器

lib 目录为 jar包存放目录 etc/init.properties 为服务器配置文件

```
[root@mac-pro~]# cd /opt
[root@mac-pro~]# tar -zxvf tigase-server-7.1.3-b4482.tar
[root@mac-pro~]# cd tigase-server-7.1.3-b4482
[root@mac-pro~]# vim etc/init.properties
```

6.2 修改init.properties 配置文件

将172.18.1.232 替换成相应服务的内网地址。

```

config-type=--gen-config-def
# --admins=admin@172.26.46.123,10005@172.26.46.123
--admins=admin@172.18.1.232
--virt-hosts=172.18.1.232
#--debug=server,xmpp,sdy,db,net

# 集群配置
#--cluster-mode=true
#--cluster-nodes=tigase-1:5277,tigase-2:5277
#--cluster-connect-all=true
#--c2s-ports=5223

--user-db=tigase.mongodb.MongoRepository
--auth-db=tigase.mongodb.MongoRepository
--user-db-uri=mongodb://172.18.1.232/tigase?authSource=admin

--redis-uri=redis://172.18.1.232:6379
--redis-password=ycim.redis
--redis-database=0

--net-buff-high-throughput = 256k
#--max-queue-size=15000
--cm-ht-traffic-throttling = xmpp:0:0:disc,bin:0:0:disc
--cm-traffic-throttling = xmpp:0:0:disc,bin:0:0:disc
--net-buff-standard = 64k
--new-connections-throttling = 222:1000
--elements-number-limit = 100000
sess-man/auth-timeout[L]=45

##imapi 的数据库链接 修改用户在线状态是用到
##mongodb://sysop:moon@localhost
--api-db-uri=mongodb://172.18.1.232:27017/imapi?authSource=admin

#同步用户在线状态
--sm-cluster-strategy-class=tigase.server.cluster.strategy.OnlineUsersCachingStrategy
##关键词过滤功能 1: 打开 0: 关闭
--confirm-open-keyword =1
"init.properties" [dos] 113L, 4104C

```

serverName是用户域，有几个地方都要保持一致 需要跟访问的地址一样（即是外网地址）。

tigase的--virt-hosts

imapi的im.xmppConfig.serverName

xmpp-push的im.xmppConfig.serverName

后台管理的xmpp虚拟域名

6.3 JVM、GC设置和建议

6.3.1 修改 etc/tigase.conf 配置文件

对于非生产部署（开发或说明环境），我们建议使用JVM的默认内存设置（这取决于底层操作系统），这会导致自动内存分配，并且根据经验，这是最安全的。环境。对于生产环境，我们建议使用固定大小的HEAP - 初始和最大大小，可以分别设置（JVM）-Xms和-XmxJVM标志

6.3.2 服务器类机器（非VM）> 16GB >= 8核CPU

建议启用CMS垃圾收集器。根据实际物理内存大小调整Xms和Xmx大小以获得实际可用内存 使用以下内容：


```
GC="-XX:+UseBiasedLocking -XX:+UseConcMarkSweepGC -XX:+UseParNewGC -XX:NewRatio=2 -
XX:+CMSIncrementalMode -XX:-ReduceInitialCardMarks -
XX:CMSInitiatingOccupancyFraction=70 -XX:+UseCMSInitiatingOccupancyOnly"
EX="-XX:+OptimizeStringConcat -XX:+DoEscapeAnalysis -XX:+UseNUMA"
HEAP=" -Xms10G -Xmx10G"
JAVA_OPTIONS="${GC} ${GC_DEBUG} ${EX} ${HEAP}"
```

6.3.3 对于具有大量可用内存的服务器，使用G1GC收集器可能是一个更好的主意

```
OSGI=${osgiEnabled}
ENC="-Dfile.encoding=UTF-8 -Dsun.jnu.encoding=UTF-8"
GC="-XX:+UseG1GC -XX:ConcGCThreads=4 -XX:G1HeapRegionSize=2 -
XX:InitiatingHeapOccupancyPercent=35 -XX:MaxGCPauseMillis=100"
EX="-XX:+OptimizeStringConcat -XX:+DoEscapeAnalysis -XX:+UseNUMA"
HEAP="-Xms60G -Xmx60G"
JAVA_OPTIONS="${GC} ${GC_DEBUG} ${EX} ${HEAP}"
```

6.3.4 8GB RAM，4核CPU等效

建议启用CMS垃圾收集器。必须配置NewRatio。需要调整Xms和Xmx大小以获得实际可用内存。应该使用以下内容：

```
GC="-XX:+UseBiasedLocking -XX:+UseConcMarkSweepGC -XX:+UseParNewGC -XX:NewRatio=2 -
XX:+CMSIncrementalMode -XX:-ReduceInitialCardMarks -
XX:CMSInitiatingOccupancyFraction=70 -XX:+UseCMSInitiatingOccupancyOnly"
EX="-XX:+OptimizeStringConcat -XX:+DoEscapeAnalysis -XX:+UseNUMA"
HEAP="-Xms7G -Xmx7G" # heap memory settings must be adjusted on per deployment-base!
JAVA_OPTIONS="${GC} ${GC_DEBUG} ${EX} ${HEAP}"
nohup java -Djava.ext.dirs="lib" ${JAVA_OPTIONS} com.mac-pro.imserver.IMServerStarter
imserver.properties > log.log &
```

6.4 在IMServer 执行 start 启动 服务

```
sh start
```

7、push 推送服务

push服务为离线消息推送服务，去消费tigase-server 放到RocketMq 队列里的离线消息

7.1 安装push 推送服务

```
[root@mac-pro~]# tar -xvf push.tar
[root@mac-pro~]# cd push
[root@mac-pro~]# vim application.properties
```


7.2 修改application.properties 配置文件

```
70 #XMPP Properties (XMPP主机和端口以及推送用户配置)
71 im.xmppConfig.host=192.168.0.128
72 im.xmppConfig.serverName=im.shiku.cn
73 im.xmppConfig.port=5222
74 im.xmppConfig.username=10005
75 im.xmppConfig.password=10005
76 im.xmppConfig.dbUri=127.0.0.1:28018
77 im.xmppConfig.dbName=tigase
78 im.xmppConfig.dbUsername=
79 im.xmppConfig.dbPassword=
80
81 im.mqConfig.nameAddr=127.0.0.1:9876

89 #Redis Properties (缓存配置)
90 im.redisConfig.address=redis://192.168.0.168:6379
91 im.redisConfig.database=0
92 im.redisConfig.password=
93 im.redisConfig.pingTimeout=10000
94 im.redisConfig.timeout=10000
95 im.redisConfig.connectTimeout=10000
96 im.redisConfig.pingConnectionInterval=500
97

98 #Mongodb Properties (数据库配置)
99 im.mongoConfig.uri=127.0.0.1:28018
100 im.mongoConfig.dbName=imapi
101 im.mongoConfig.roomDbName=imRoom
```

Annotations in the image:

- Line 71: `im.xmppConfig.host=192.168.0.128` → tigase-server 的连接地址, 这里host 配置为内网ip即可, 注意不能是127.0.0.1
- Line 72: `im.xmppConfig.serverName=im.shiku.cn` → serverName 和tigase-server 的virt-host保持一致
- Line 76: `im.xmppConfig.dbUri=127.0.0.1:28018` → 数据库地址
- Line 81: `im.mqConfig.nameAddr=127.0.0.1:9876` → RocketMq 连接地址
- Line 90: `im.redisConfig.address=redis://192.168.0.168:6379` → Redis 连接地址
- Line 99: `im.mongoConfig.uri=127.0.0.1:28018` → 数据库连接地址

目前ios 支持anps和极光推送，安卓目前集成了华为、小米、魅族、vovo、oppo，谷歌六种推送，如果手机有谷歌框架且能访问外网，会使用谷歌推送，否则根据机型来，非以上机型使用小米推送如已经申请好相关配置，将申请好的小米、华为、极光 等平台的key secret 配置到对应的位置。也可以后续在配置，加上配置重启push 服务即可

```

51 # 消息推送相关配置（小米、华为、魅族等）
52 im.pushConfig.packageName=com.sk.weichat
53
54 # 小米推送
55 im.pushConfig.xm_appSecret=wet...
56
57 # 华为推送
58 im.pushConfig.hw_appSecret=3b6...
59 im.pushConfig.hw_appId=100...
60 im.pushConfig.hw_tokenUrl=https://login.cloud.huawei.com/oauth2/v2/token
61 im.pushConfig.hw_apiUrl=https://api.push.hicloud.com/pushsend.do
62 im.pushConfig.hw_iconUrl=http://pic.qiantuodn.com/58pic/12/38/18/13758PIC4GV.jpg
63
64 ##ios 推送
65 im.pushConfig.betaAppId=com.shiku.coolim.push1
66 im.pushConfig.betaApnsPk=/opt/shiku-push/apns_push1_pro.pl2
67
68 im.pushConfig.appStoreAppId=com.shiku.im.push
69 im.pushConfig.appStoreApnsPk=/opt/shiku-push/apns_pro.pl2
70
71 im.pushConfig.voipPk=/opt/shiku-push/voippush.pl2
72
73 im.pushConfig.pkPassword=123...
74
75 im.pushConfig.isApnsSandbox=0
76
77 im.pushConfig.isDebugEnabled=1
78
79
80 # 极光推送
81 im.pushConfig.jPush_appkey=691...
82 im.pushConfig.jPush_masterSecret=e59...
83
84 # google FCM 推送
85 im.pushConfig.FCM_dataBaseUrl=https://sixth-hawk-164509.firebaseio.com
86 im.pushConfig.FCM_keyJson=/opt/shiku-push/sixth-hawk-164509-firebase-adminsdk-342gn-465351f0ef.json
87
88 #魅族推送
89 im.pushConfig.mz_appId=118...
90 im.pushConfig.mz_appSecret=15c...
91
92 # VIVO推送
93 im.pushConfig.vivo_appId=109...
94 im.pushConfig.vivo_appKey=472...
95 im.pushConfig.vivo_appSecret=127...
96 # OPPO推送
97 im.pushConfig.oppo_appKey=dIH...
98 im.pushConfig.oppo_masterSecret=Bb3...

```

ios apns 推送配置

替换ios apns推送证书，个人版和企业版选择一个使用即可，需要注意在申请ios apns 证书的时候必须要设置密码。

7.3.修改完配置后使用 sh start 命令启动push服务

```
sh start
```

8、安装xmpp-push服务

说明：xmpp-push 是从 imapi 中独立出来的服务，用于发送系统Xmpp 消息Imapi 服务里面群组等部分接口操作后，需要发一条xmpp 消息通知用户，此时imapi 将需要发送的xmpp 消息放到rocketMq 队列下，由xmpp-push 服务获取队列里的消息然后把消息经过tigage-server 发送到设备端

8.1 安装 xmpp-push 服务并 参照如下示例，修改配置文件

```

[root@mac-pro~]# cd /opt
[root@mac-pro~]# tar -xvf xmpp-push.tar
[root@mac-pro~]# cd xmpp-push
[root@mac-pro~]# vim application.properties

```

```

8  #Mongodb Properties (数据库配置)
9  im.mongoConfig.uri=mongodb://127.0.0.1:28018
10 im.mongoConfig.dbName=imapi
11 im.mongoConfig.roomDbName=imRoom
12 im.mongoConfig.username=
13 im.mongoConfig.password=
14 im.mongoConfig.connectTimeout=20000
15 im.mongoConfig.socketTimeout=20000
16 im.mongoConfig.maxWaitTime=20000
17
18 rocketmq.name-server=127.0.0.1:9876
19 rocketmq.producer.group=group-shikupush
20 rocketmq.producer.send-message-timeout=30000
21 im.mqConfig.nameAddr=localhost:9876
22 ##mq 消费最小程数量 默认 cup 数量
23 #im.mqConfig.threadMin=4
24 ##mq 消费最大程数量 默认 cup 数量*2
25 #im.mqConfig.threadMax=8
26 ##mq 批量消费数量 默认 20
27 #im.mqConfig.batchMaxSize=30
28
29
30 #Redis Properties (缓存配置)
31 im.redisConfig.address=redis://127.0.0.1:6379
32 im.redisConfig.database=0
33 im.redisConfig.password=
34
35 #系统号
36 admin.systemUsers=10001:10001,10002:10002,10003:10003,10004:10004,10005:10005,10006:10006,10007:10007,10008:10008,10009:10009,10010:10010
37
38 im.imConfig.host=127.0.0.1
39 im.imConfig.port=5666
40 im.imConfig.pingTime=10000
41

```

mongodb连接地址

RocketMq连接地址

redis连接地址

IMServer 连接地址，配置内网ip即可

8.2 启动 xmpp-push 服务

```
[root@mac-pro~]#sh start
```

9、安装Upload文件上传服务

9.1 安装Upload服务

```

[root@mac-pro~]# cd /opt
[root@mac-pro~]# tar -xvf upload.tar
[root@mac-pro~]# cd upload
[root@mac-pro~]# vim application.properties

```

9.2 参照如下示例修改配置：

说明：/data/www/resources：文件上传成功后存储的根目录 beginIndex：根目录

“/data/www/resources”的字符串长度（从0开始）用于分隔字符串生成文件链接用（需要注意，如果修改了相关路径，beginIndex 的数值也要相应修改）

```
spring.mvc.view.prefix=/
spring.mvc.view.suffix=.jsp
server.context-path=/upload
```

```
server.port=8088
```

```
##https
```

```
server.openHttps=false
```

```
#http.port=8080
```

```
#server.ssl.key-store=/opt/upload/imshiku.pfx
```

```
#server.ssl.key-store-password=
```

```
#server.ssl.key-store-type=PKCS12
```

```
domain=http://im.server.com:8089
```

```
isBackDomain=1
```

文件访问地址

上传后用该地址拼接文件路径
得到完整url 返回给客户端

```
##是否 把文件上传到 fastdfs # 文件系统中
```

```
isOpenfastDFS=0
```

是否启用fastDfs

```
fastdfsDomain=http://im.server.com:8089
```

fastDfs 模式下文件访问地址

```
fastdfsBasePath=/data/fastdfs
```

```
##保存文件的数据库 url
```

fastDfs 基础存储路径

```
## 只修改 mongodb://127.0.0.1:28018
```

```
## /resources 不需要修改
```

```
dbUri=mongodb://127.0.0.1:28018/resources
```

```
##开启定时任务 删除文件
```

```
## 0 关闭 1 开启
```

数据库连接地址

```
## 在部署 多个 upload 项目的情况下
```

```
##只需要 一个 项目 执行定时任务就可以了
```

```
openTask=1
```

```
basePath=/data/www/resources
```

```
nTemp=/data/www/resources/%1$s/%2$s/
```

```
oTemp=/data/www/resources/%1$s/%2$s/
```

```
tTemp=/data/www/resources/%1$s/%2$s/
```

```
uTemp=/data/www/resources/temp/
```

```
beginIndex=19
```

```
#是否将amr编码为mp3: 0=否; 1=是
```

```
amr2mp3=0
```

```
imageFilter = gif|jpg|jpeg|bmp|png|
```

```
videoFilter = mp4|flv|wmv|
```

```
audioFilter = acc|amr|mp3|
```

```
##fastdfs 的配置
```

```
#####
```

```
connect_timeout = 2
```

```
network_timeout = 30
```

```
charset = UTF-8
```

```
http.tracker_http_port = 80
```

```
http.anti_steal_token = no
```

```
http.secret_key = FastDFS1234567890
```

```
tracker_server= 192.168.0.155:22122,192.168.0.156:22122
```

fastDfs tracker_server 连接地址

9.3 在文件上传服务所在机器创建存储目录（例如“/data/www/resources”）并初始化目录结构

可以直接将以下命令全部拷贝到Linux服务器一次性执行

```
mkdir -p /data/www/resources
cd /data/www/resources
mkdir audio
mkdir avatar
mkdir avatar/o
mkdir avatar/t
mkdir avatar_r
mkdir avatar_r/o
mkdir avatar_r/t
mkdir gift
mkdir image
mkdir image/o
mkdir image/t
mkdir other
mkdir preview
mkdir temp
mkdir u
mkdir video
```

9.4 启动 upload

```
[root@mac-pro~]# cd /opt/upload
[root@mac-pro~]# sh start
```

```
FastDFS config =====>
{
  g_connect_timeout(ms) = 2000
  g_network_timeout(ms) = 30000
  g_charset = UTF-8
  g_anti_steal_token = false
  g_secret_key = FastDFS1234567890
  g_tracker_http_port = 80
  trackerServers = 172.31.77.83:22122
}
=====> 上传服务启动成功 请放心使用 =====>
```

10、安装FastDFS分布式文件存储服务

10、安装Nginx，配置文件访问

10.1 首先安装 nginx 所需的依赖

```
[root@mac-pro~]# yum install -y pcre pcre-devel zlib zlib-devel openssl openssl-devel
```

10.2 安装 Nginx-1.9.11

```
[root@mac-pro~]# cd /opt
[root@mac-pro~]# tar -zxvf nginx-1.9.11.tar.gz
[root@mac-pro~]# mv nginx-1.9.11 nginx-install
[root@mac-pro~]# cd nginx-install
[root@mac-pro~]# ./configure --prefix=/opt/nginx-1.9.11 --with-http_ssl_module --with-stream
[root@mac-pro~]# make && make install
[root@mac-pro~]# rm -rf ../nginx-install
```

10.3在/opt/nginx-1.9.11目录下创建start、stop脚本：

vim start, 写入如下内容

```
./sbin/nginx
ps -ef|grep nginx
```

vim stop, 写入如下内容

```
./sbin/nginx -s stop
ps -ef|grep nginx
```

10.4 在upload 所在的机器上 配置头像访问。首先请确保已经安装 Nginx，如没有安装请参考上面的 安装 Nginx-1.9.11中的步骤进行安装。

说明：由于FastDfs 不支持对上传文件的自定义命名，而目前用户头像是根据userId 命名的，所以目前用户头像没有使用FastDfs 储存。

10.5 修改Nginx 配置文件 nginx.conf，添加如下内容

```
#用户头像访问
server{
    listen      80;
    server_name  head.mac-pro.co;
    #拒接访问html 等类型的文件避免受到脚本攻击
```



```

location ~* /\. (html|htm|jsp|php|js)$ {
    deny all;
}

location /{
    root    /data/www/resources;
    expires 4d;
}
}
#ip 配置示例
server{
    listen      8080;
    #本机外网ip
    server_name 192.168.0.168;
    #拒接访问html 等类型的文件避免受到脚本攻击
    location ~ /\. (html|htm|jsp) {
        deny all;
    }

    location ~* /{
        root    /data/www/resources;
        expires 4d;
    }
}

```

如按IP方式配置即得到文件访问、下载路径 为 ip:8080

3) 执行start、stop脚本，查看nginx是否启动、停止成功：

```

[root@www nginx]# sh start
root      9803      1  0 17:48 ?           00:00:00 nginx: master process ./sbin/nginx
root      9805    9801  0 17:48 pts/0       00:00:00 grep nginx
nobody    9806    9803  0 17:48 ?           00:00:00 nginx: worker process
nobody    9807    9803  0 17:48 ?           00:00:00 nginx: worker process
nobody    9808    9803  0 17:48 ?           00:00:00 nginx: worker process
nobody    9809    9803  0 17:48 ?           00:00:00 nginx: worker process
nobody    9810    9803  0 17:48 ?           00:00:00 nginx: worker process
nobody    9811    9803  0 17:48 ?           00:00:00 nginx: worker process
[root@www nginx]# sh stop
root      9851    9848  0 17:48 pts/0       00:00:00 grep nginx

```

至此服务端相关服务已经部署完成

最后徐修改后台配置

Imapi服务启动完成后，在浏览器打开链接["http://localhost:8092/console/login"](http://localhost:8092/console/login)

账号密码 默认1000

将系统配置---> 客户端配置里的地址修改为部署的服务器的地址，这些地址用于在客户端启动时返回给客户端使用，请参考下图

●即时通讯管理系统

主题 欢迎你, 超级管理员:1000

系统概览

系统设置

服务器设置

APP设置

启动引导设置

匿名管理

APP发现页设置

APPTabBar设置

版本管理

第三方登录

后台配置

用户管理

推广管理

运营统计

参数说明	参数值	变量名	参数说明
XMPP 主机 host	39.98.249.163	XMPPHost	
XMPP 虚拟域名	39.98.249.163	XMPPDomain	
PC XMPP 主机 host	39.98.249.163	PCXMPPHost	PC端链接的 XMPP主机host
PC XMPP 虚拟域名	39.98.249.163	PCXMPPDomain	PC端链接的 XMPP虚拟域名
是否启用消息多节点	关闭	isNodesStatus	
接口URL	http://39.98.249.163/	apiUrl	
头像下载URL		downloadAvatarUrl	
资源下载URL		downloadUrl	
资源上传URL	http://39.98.249.163:8088/	uploadUrl	

修改配置保存后访问

<http://localhost:8092/config>

Raw Parsed

```
{
  "currentTime": 1602308853904,
  "data": {
    "PCXMPPDomain": "39.98.249.163",
    "PCXMPPHost": "39.98.249.163",
    "XMPPDomain": "39.98.249.163",
    "XMPPHost": "39.98.249.163",
    "XMPPTimeout": 15,
    "address": "CN",
    "aliLoginStatus": 2,
    "aliPayStatus": 2,
    "aliWithdrawStatus": 2,
    "androidAppUrl": "",
    "androidDisable": "",
    "androidExplain": "",
    "androidVersion": 0,
    "apiUrl": "http://39.98.249.163/",
    "appleId": "",
    "audioLen": 20,
    "chatRecordTimeOut": -1,
    "displayRedPacket": 1,
    "distance": 20,
    "downloadAvatarUrl": "",
    "downloadUrl": "",
    "fileValidTime": -1,
    "guideWebsite": "",
    "headBackgroundImg": "",
    "helpUrl": "",
    "hideSearchByFriends": 1,
    "invisibleList": [],
    "iosAppUrl": "",
    "iosDisable": "",
    "iosExplain": "",
    "iosVersion": 0,
    "ipAddress": "127.0.0.1",
    "isCommonCreateGroup": 0,
    "isCommonFindFriends": 0,
    "isDiscoverStatus": 1,
    "isNodesStatus": 0,
    "isOpenCluster": 0,
    "isOpenGoogleFCM": 0,
    "isOpenOSStatus": 0,
    "isOpenPositionService": 0,
    "isOpenReadReceipt": 1,
    "isOpenRegister": 1,
    "isOpenSMSCode": 1,
    "isOpenTelnum": 1,
    "isOpenTwoBarCode": 1,
    "isQestionOpen": 0,
    "isTabBarStatus": 1,
    "isUserSignRedPacket": 0,
    "isWithdrawToAdmin": 0,
    "jitsiServer": "",
    "liveUrl": "",
    "macAppUrl": "",
    "macDisable": "",
    "macExplain": "",
    "macVersion": 0,
    "minTransferAmount": 0.0,
    "minWithdrawToAdmin": 0.0,
    "nicknameSearchUser": 2,
    "pcXMPPDomain": "39.98.249.163",
    "pcXMPPHost": "39.98.249.163",
    "pcAppUrl": "",
    "pcDisable": "",
    "pcExplain": "",
    "pcVersion": 0,
    "popularAPP": "",
    "lifeCircle": {
      "videoMeeting": 1,
      "liveVideo": 1,
      "shortVideo": 1,
      "peopleNearby": 1,
      "scan": 1
    },
    "projectIco": "",
    "projectLogo": "http://39.98.249.163:8087/group1/M00/00/00/rBoue18xIPyAK4Q0AAAdXTxnrE548.png",
    "projectName": "",
    "qqLoginStatus": 2,
    "regeditPhoneOrName": 0,
    "registerInviteCode": 0,
    "shareUrl": "",
    "showContactsUser": 1,
    "softUrl": "",
    "tabBarConfigList": {
      "tabBarNum": 0,
      "tabBarStatus": 0,
      "tlPayStatus": 2,
      "tlWithdrawStatus": 2,
      "transferExtraFee": 0.0,
      "transferRate": 0.0,
      "uploadMaxSize": 0,
      "uploadUrl": "http://39.98.249.163:8088/",
      "videoLen": 20,
      "website": "",
      "wechatLoginStatus": 2,
      "wechatPayStatus": 2,
      "wechatWithdrawStatus": 2,
      "XMPPDomain": "39.98.249.163",
      "XMPPHost": "39.98.249.163",
      "XMPPTimeout": 15,
      "xmppPingTime": 6,
      "resultCode": 1
    }
  }
}
```

最后

<http://localhost:8092/config> 为客户端配置的apiurl 将 apiUrl和 apiKey（在imapi服务配置文件中配置）提供 给客户端，客户端打包需要的，至此大功告成。

11、将服务设置为开机自启动

注意：这里的启、停本质上也是执行对应服务的安装目录下的start 与stop脚本

如果之前start脚本里配置的是相对路径，那么就需要改为绝对路径

11.1 Mongodb

在/lib/systemd/system/目录下新建mongodb.service文件，内容如下：

```
[Unit]
Description=mongodb
After=network.target remote-fs.target nss-lookup.target

[Service]
Type=forking
ExecStart=/opt/mongodb-3.2.4/bin/mongod --config /opt/mongodb-3.2.4/mongo.conf
ExecReload=/bin/kill -s HUP $MAINPID
ExecStop=/opt/mongodb-3.2.4/bin/mongod --shutdown --config /opt/mongodb-
3.2.4/mongo.conf
PrivateTmp=true

[Install]
WantedBy=multi-user.target
```

如图所示：

```
[Unit]
Description=mongodb
After=network.target remote-fs.target nss-lookup.target

[Service]
Type=forking
ExecStart=/opt/mongodb-3.2.4/bin/mongod --config /opt/mongodb-3.2.4/mongo.conf
ExecReload=/bin/kill -s HUP $MAINPID
ExecStop=/opt/mongodb-3.2.4/bin/mongod --shutdown --config /opt/mongodb-3.2.4/mongo.conf
PrivateTmp=true

[Install]
WantedBy=multi-user.target
```

设置权限

```
[root@mac-pro~]# chmod 754 mongodb.service
```

启动服务

```
[root@mac-pro~]# systemctl start mongodb.service
```

关闭服务

```
[root@mac-pro~]# systemctl stop mongodb.service
```

开机启动

```
[root@mac-pro~]# systemctl enable mongodb.service
```

11.2 Redis

在/lib/systemd/system/目录下新建redis.service文件，内容如下：

```
[Unit]
Description=redis
After=syslog.target network.target

[Service]
Type=forking
PIDFile=/var/run/redis_6388.pid
ExecStart=/opt/redis-4.0.1/src/redis-server /opt/redis-4.0.1/redis.conf
ExecReload=/bin/kill -USR2 $MAINPID
ExecStop=/bin/kill -SIGINT $MAINPID

[Install]
WantedBy=multi-user.target
```

如下图所示：

```
[Unit]
Description=redis
After=syslog.target network.target

[Service]
Type=forking
PIDFile=/var/run/redis_6388.pid
ExecStart=/opt/redis-4.0.1/src/redis-server /opt/redis-4.0.1/redis.conf
ExecReload=/bin/kill -USR2 $MAINPID
ExecStop=/bin/kill -SIGINT $MAINPID

[Install]
WantedBy=multi-user.target
```

设置权限

```
[root@mac-pro~]# chmod 754 redis.service
```

启动服务

```
[root@mac-pro~]# systemctl start redis.service
```

关闭服务

```
[root@mac-pro~]# systemctl stop redis.service
```

开机启动

```
[root@mac-pro~]# systemctl enable redis.service
```

11.3 Nginx

在/lib/systemd/system/目录下新建 nginx.service文件，内容如下：

```
[Unit]
Description=nginx
After=syslog.target network.target

[Service]
Type=forking
ExecStart=/opt/nginx_1.9.11/sbin/nginx
ExecReload=/opt/nginx_1.9.11/sbin/nginx -s reload
ExecStop=/opt/nginx_1.9.11/sbin/nginx -s quit
PrivateTmp=true

[Install]
WantedBy=multi-user.target
```

设置权限

```
[root@mac-pro~]# chmod 754 nginx.service
```

启动服务

```
[root@mac-pro~]# systemctl start nginx.service
```

关闭服务

```
[root@mac-pro~]# systemctl stop nginx.service
```

开机启动

```
[root@mac-pro~]# systemctl enable nginx.service
```

11.4 Imapi

注: 设置开机自启动服务启动脚本全部要求使用绝对路径，和给予相应执行权限

如：

```
#!/bin/bash
GC="-XX:+UseBiasedLocking -XX:+UseConcMarkSweepGC -XX:+UseParNewGC -XX:NewRatio=2 -XX:+CMSIncrementalMode -XX:ParallelCMSThreads=2 -XX:-ReduceInitialCardMarks -XX:CMSInitiatingOccupancyFraction=70 -XX:+UseCMSInitiatingOccupancyOnly -XX:+HeapDumpOnOutOfMemoryError"
#EX="-XX:+OptimizeStringConcat -XX:+DoEscapeAnalysis -XX:+UseNUMA"

GC_DEBUG="-XX:+PrintTenuringDistribution -XX:+PrintGCDetails -XX:+PrintGCDateStamps -XX:+PrintGCTimeStamps -Xloggc:logs/jvm.log -verbose:gc "

PRODUCTION_HEAP_SETTINGS="-Xms2G -Xmx2G -Xss228k"

JAVA_OPTIONS="-{GC} ${GC_DEBUG} -server ${PRODUCTION_HEAP_SETTINGS} ${DNS_RESOLVER} ${INTERNAL_IP} ${EXTERNAL_IP} -XX:MaxDirectMemorySize=128m "

cd /opt/imapi/
nohup /opt/java/jdk1.8.0_131/bin/java ${JAVA_OPTIONS} -jar imserver-api-*.jar --spring.config.location=/opt/imapi/application.properties >> log.log &
tail -f log.log
```

在/lib/systemd/system/目录下新建 imapi.service文件，内容如下：

```
[Unit]
Description=imapi
```

```
After=syslog.target network.target remote-fs.target nss-lookup.target mongodb.service  
redis.service
```

```
[Service]  
Type=simple  
PIDFile=/opt/imapi/imapi.pid  
ExecStart=/opt/imapi/start  
ExecReload=/bin/kill-s HUP $MAINPID  
ExecStop=/opt/spring-boot-imapi/stop  
PrivateTmp=true
```

```
[Install]  
WantedBy=multi-user.target
```

如下图所示：

```
1 [Unit]  
2 Description=imapi  
3 After=syslog.target network.target remote-fs.target nss-lookup.target mongodb.service redis.service  
4  
5 [Service]  
6 Type=simple  
7 PIDFile=/opt/imapi/imapi.pid  
8 ExecStart=/opt/imapi/start  
9 ExecReload=/bin/kill-s HUP $MAINPID  
10 ExecStop=/opt/spring-boot-imapi/stop  
11 PrivateTmp=true  
12  
13 [Install]  
14 WantedBy=multi-user.target  
~  
~
```

设置权限

```
[root@mac-pro~]# chmod 754 imapi.service
```

启动服务

```
[root@mac-pro~]#systemctl start imapi.service
```

关闭服务

```
[root@mac-pro~]#systemctl stop imapi.service
```

开机启动

```
[root@mac-pro~]#systemctl enable imapi.service
```

11.5 Tigase-Server

在/lib/systemd/system/目录下新建 tigase.service文件，内容如下：

```
[Unit]
Description=tigase-server
After=syslog.target network.target remote-fs.target nss-lookup.target mongod.service
redis.service

[Service]

Type=forking
ExecStart=/opt/tigase-server-7.1.3-b4482/start
ExecReload=/bin/kill-s HUP $MAINPID
ExecStop=/opt/tigase-server-7.1.3-b4482/stop
PrivateTmp=true

[Install]
WantedBy=multi-user.target
```

设置权限

```
[root@mac-pro~]# chmod 754 tigase-server.service
```

启动服务

```
[root@mac-pro~]#systemctl start tigase-server.service
```

关闭服务

```
[root@mac-pro~]#systemctl stop tigase-server.service
```

开机启动

```
[root@mac-pro~]#systemctl enable tigase-server.service
```

11.6 rocketmq

在/lib/systemd/system/目录下新建 rocketmq.service文件，内容如下：

```
[Unit]
Description=rocketmq
After=syslog.target network.target remote-fs.target nss-lookup.target

[Service]
Type=forking
ExecStart=/opt/rocketmq-all-4.3.2-bin-release/mqStart
ExecReload=/bin/kill-s HUP $MAINPID
ExecStop=/opt/rocketmq-all-4.3.2-bin-release/mqStop
PrivateTmp=true

[Install]
WantedBy=multi-user.target
```

设置权限

```
[root@mac-pro~]# chmod 754 rocketmq.service
```

启动服务

```
[root@mac-pro~]#systemctl start rocketmq.service
```

关闭服务

```
[root@mac-pro~]#systemctl stop rocketmq.service
```

开机启动

```
[root@mac-pro~]#systemctl enable rocketmq.service
```

11.7 xmpp-push

在/lib/systemd/system/目录下新建 xmpp-push.service文件，内容如下：

```
[Unit]

Description=xmpp-push
After=syslog.target network.target remote-fs.target nss-lookup.target  mongodb.service
redis.service rocketmq.service

[Service]
ExecStart=/opt/xmpp-push/start
ExecReload=/bin/kill-s HUP $MAINPID
ExecStop=/opt/xmpp-push/stop
PrivateTmp=true

[Install]
WantedBy=multi-user.target
```

设置权限

```
[root@mac-pro~]# chmod 754 xmpp-push.service
```

启动服务

```
[root@mac-pro~]#systemctl start xmpp-push.service
```

关闭服务

```
[root@mac-pro~]#systemctl stop xmpp-push.service
```

开机启动

```
[root@mac-pro~]#systemctl enable xmpp-push.service
```

11.8 push

在/lib/systemd/system/目录下新建 push.service文件，内容如下：

```
[Unit]

iDescription=push
After=syslog.target network.target remote-fs.target nss-lookup.target mongodb.service
redis.service rocketmq.service

[Service]
ExecStart=/opt/push/start
ExecReload=/bin/kill-s HUP $MAINPID
ExecStop=/opt/push/stop
PrivateTmp=true

[Install]
WantedBy=multi-user.target
```

设置权限

```
[root@mac-pro~]# chmod 754 push.service
```

启动服务

```
[root@mac-pro~]#systemctl start push.service
```

关闭服务

```
[root@mac-pro~]#systemctl stop push.service
```

开机启动

```
[root@mac-pro~]#systemctl enable push.service
```

11.9 upload

在/lib/systemd/system/目录下新建 upload.service文件，内容如下：

```
[Unit]

iDescription=push
After=syslog.target network.target remote-fs.target nss-lookup.target  mongodb.service
redis.service rocketmq.service

[Service]
ExecStart=/opt/upload/start
ExecReload=/bin/kill-s HUP $MAINPID
ExecStop=/opt/upload/stop
PrivateTmp=true

[Install]
WantedBy=multi-user.target
```

设置权限

```
[root@mac-pro~]# chmod 754 upload.service
```

启动服务

```
[root@mac-pro~]#systemctl start upload.service
```

关闭服务

```
[root@mac-pro~]#systemctl stop upload.service
```

开机启动

```
[root@mac-pro~]#systemctl enable upload.service
```

二、部署方式二（通过docker部署）

注：如习惯使用Docker 容器部署项目，并具有相应的使用、维护经验，则可以使用Docker 容器的方式部署。

1. 安装docker（以centos7.X 为例）

```
[root@mac-pro ~]# uname -r
```



```
[root@localhost ~]# uname -r
3.10.0-693.el7.x86_64
[root@localhost ~]#
```

安装 docker 服务

```
[root@mac-pro ~]# yum -y install docker-io
```

```
Installed:
  docker.x86_64 2:1.13.1-63.git94f4240.el7.centos

Dependency Installed:
  container-selinux.noarch 2:2.55-1.el7
  container-storage-setup.noarch 0:0.9.0-1.rhel75.gite0997c3.el7
  docker-client.x86_64 2:1.13.1-63.git94f4240.el7.centos
  docker-common.x86_64 2:1.13.1-63.git94f4240.el7.centos
  oci-register-machine.x86_64 1:0-6.git2b44233.el7
  oci-systemd-hook.x86_64 1:0.1.15-2.gitc04483d.el7
  oci-umount.x86_64 2:2.3.3-3.gite3c9055.el7
  skopeo-containers.x86_64 1:0.1.29-3.dev.git7add6fc.el7

Dependency Updated:
  libselinux.x86_64 0:2.5-12.el7
  libselinux-python.x86_64 0:2.5-12.el7
  libselinux-utils.x86_64 0:2.5-12.el7
  libsemanage.x86_64 0:2.5-11.el7
  libsemanage-python.x86_64 0:2.5-11.el7
  libsepol.x86_64 0:2.5-8.1.el7
  policycoreutils.x86_64 0:2.5-22.el7
  policycoreutils-python.x86_64 0:2.5-22.el7
  selinux-policy.noarch 0:3.13.1-192.el7_5.3
  selinux-policy-targeted.noarch 0:3.13.1-192.el7_5.3
  setools-libs.x86_64 0:3.3.8-2.el7

Complete!
```

启动docker 服务

```
[root@mac-pro ~]#service docker start
```

```
[root@localhost ~]# service docker start
Redirecting to /bin/systemctl start docker.service
[root@localhost ~]# ps -ef|grep docker
root      3850      1  0 06:52 ?                00:00:00 /usr/bin/dockerd-current --add-runtime d
ocker-runc=/usr/libexec/docker/docker-runc-current --default-runtime=docker-runc --exec-
opt native.cgroupdriver=systemd --userland-proxy-path=/usr/libexec/docker/docker-proxy-c
urrent --init-path=/usr/libexec/docker/docker-init-current --seccomp-profile=/etc/docker
/seccomp.json --selinux-enabled --log-driver=journald --signature-verification=false --s
torage-driver overlay2
root      3855  3850  0 06:52 ?                00:00:00 /usr/bin/docker-containerd-current -l un
ix:///var/run/docker/libcontainerd/docker-containerd.sock --metrics-interval=0 --start-t
imeout 2m --state-dir /var/run/docker/libcontainerd/containerd --shim docker-containerd-
shim --runtime docker-runc --runtime-args --systemd-cgroup=true
root      3961  2366  0 06:53 pts/0          00:00:00 grep --color=auto docker
[root@localhost ~]#
```

2. Docker 创建Redis 容器

1、从官方仓库拉取redis 4.0.1 的镜像

```
[root@mac-pro ~]# docker pull redis:4.0.1
```

```
[root@izbpla5bxfhn22cit0b97wz ~]# docker pull redis:4.0.1
4.0.1: Pulling from library/redis
065132d9f705: Pull complete
be9835c27852: Pull complete
f4a0d1212c38: Pull complete
ealf878b621a: Pull complete
7a838393b4b9: Pull complete
9f48e489da12: Pull complete
Digest: sha256:8a54dcc711406447b3631a81ef929f500e6836b43e7d61005fa27057882159da
Status: Downloaded newer image for redis:4.0.1
```

2、在宿主机创建 /data/redis 目录

```
mkdir /data/redis
```

3、通过镜像启动容器

```
docker run -p 6388:6379 --name redis-4.0.1 --hostname redis --restart=always -v
/data/redis:/data -d redis:4.0.1 redis-server --appendonly yes
```

```
[root@izbpla5bxfhn22cit0b97wz docker]# docker run -p 6388:6379 --name redis-4.0.1 --hostname red
e4c8bfef1bb56043b5ed0bc755e20f6bc92545640a42ed99430d5e4af9b58
[root@izbpla5bxfhn22cit0b97wz docker]#
```

3. Docker 创建Mongodb容器

1、使用命令从官方仓库拉取3.4.0 版本的镜像

```
[root@mac-pro ~]# docker pull mongo:3.4.0
```

2、在宿主机创建目录

```
mkdir -p /data/mongodb/db
```

3、使用镜像启动容器

```
docker run -d -p 27107:27017 -v /data/mongodb/db:/data/db --restart=always --name  
mongodb mongo:3.4.0
```

注：IP地址请根据实际部署机器的内网ip进行调整

4. Docker 创建imapi容器

1、在imapi 的部署文件imapi中创建 imapi_dockerfile文件， 写入如下内容

```
FROM java:8  
VOLUME /opt/logs  
COPY application.properties /opt/application.properties  
ADD imapi.war /opt/imapi.war  
RUN bash -c 'touch /opt/imapi.war'  
EXPOSE 8092  
  
ENTRYPOINT ["java","-jar","/opt/imapi.war","--  
spring.config.location=/opt/application.properties"]
```

说明：这里的application.properties 从 imapi 目录里拷贝imapi.war 为imapi 服务的部署包

2、通过dockerfile 文件构建镜像

```
docker build -t imapi -f imapi_dockerfile ./
```

3、通过镜像启动容器

```
docker run -d -p 8092:8092 -e "UPLOAD_ADDR=192.168.0.152:8088" -e  
"MONGODB_ADDR=192.168.0.151:27107" -e "NAMESRV_ADDR=192.168.0.155:9876" -e  
"XMPP_HOST=192.168.0.155" -e "XMPP_SERVERNAME=im.mac-pro.co" -e  
"REDIS_ADDR=redis://192.168.0.155:6379" --name imapi-server imapi
```

5. Docker 创建Tigase-server容器

1、修改 tigase-server-7.1.3-b4482/etc/tigase.conf 配置文件

```
#DNS_RESOLVER=" -Dresolver-class=tigase.util.DNSResolverDefault "
#INTERNAL_IP=" -Dtigase-primary-address=hostname.local "
#EXTERNAL_IP=" -Dtigase-secondary-address=hostname "
Shiku="-Dtigase-configurator=tigase.shiku.conf.ShikuConfigurator"
JAVA_HOME="${JAVA_HOME}"
CLASSPATH=""
TIGASE_HOME="/opt/tigase-server"
#PRODUCTION_HEAP_SETTINGS=" -Xms5G -Xmx5G " # heap memory settings must be set
JAVA_OPTIONS="${GC} ${Shiku} ${GC_DEBUG} ${EX} ${ENC} ${DRV} ${JMX_REMOTE}"
TIGASE_OPTS="--property-file etc/init.properties "
```

修改 JAVA_HOME 的值为 "\${JAVA_HOME}"，修改 TIGASE_HOME 的值为 "/opt/tigase-server"

JAVA_HOME="\${JAVA_HOME}"

TIGASE_HOME="/opt/tigase-server"

2、修改 tigase-server-7.1.3-b4482/etc/init.properties 配置文件

```
config-type=--gen-config-def
--admins=admin@oem.shiku.co,10005@oem.shiku.co
--virt-hosts=oem.shiku.co
--debug=server,xmpp,shiku,db,net

# 集群配置
--cluster-mode=true
--cluster-nodes=tigase-1:5277,tigase-2:5277
--cluster-connect-all=true

--user-db=tigase.mongodb.MongoRepository
--auth-db=tigase.mongodb.MongoRepository
--user-db-uri=mongodb://172.16.6.117:28018/tigase

##imapi 的数据库链接 修改用户在线状态是用到
##mongodb://sysop:moon@localhost
--api-db-uri=mongodb://172.16.6.117:28018/imapi

##关键词过滤功能 1: 打开 0: 关闭
--confirm-open-keyword=1
#消息存储
--shiku-archive-jid=shiku-message-archive@oem.shiku.co
--shikuDebug=1
#离线通知
--shikuPush_mqAddr=192.168.0.139:9876

--sm-plugins=-starttls,shiku-auto-reply,shiku-offline-msg,shiku-message-archive-plugin,jabber:iq:register
##XEP-0198
c2s/processors[s]=urn:xmpp:sm:3
bosh/processors[s]=urn:xmpp:sm:3
# AMP Component
```

Tigase 所在机器的IP或域名，生产环境建议使用域名，注意，这里如配置ip不能是127.0.0.1，必须是实际外网ip，如：39.17.42.155

数据库链接地址

这里和顶部的 virt-hosts 保持一致

RocketMq 连接地址

```

# AMP Component
sess-man/plugins-conf/enabled-mechanisms=PLAIN
amp/amp-repo-uri=mongodb://172.16.6.117:28018/tigase
amp/amp-repo-class=tigase.mongodb.MongoMsgRepository
# AMP Plugin
sess-man/plugins-conf/amp/amp-repo-uri=mongodb://172.16.6.117:28018/tigase
sess-man/plugins-conf/amp/amp-repo-class=tigase.mongodb.MongoMsgRepository
amp/store-limit[L]=1000
#https
#bosh/connections/ports[i] = 5280,5281
#bosh/connections/5281/socket = ssl
#bosh/connections/5281/type = accept

#bosh/max-batch-size[I]=100
bosh/max-session-waiting-packets[I]=500

--comp-name-1=http
--comp-class-1=tigase.http.HttpMessageReceiver
http/api-keys[s]=open_access
http/http/port[I]=9090
http/http/server-class[S]=tigase.http.jetty.JettyStandaloneHttpServer

# 群聊组件
--comp-name-2=muc
--comp-class-2=tigase.muc.MUComponent

## 遍历所有的连接，检查它们是否都真正的活着 间隔时间 毫秒 10000 即 10秒
--watchdog_delay=40000
--watchdog_ping_type=xmpp
## 毫秒 如果 客户端 超出该时间 未与服务端链接 即 离线
--watchdog_timeout=75000

muc/history-db=tigase.mongodb.muc.MongoHistoryProvider
muc/history-db-uri=mongodb://172.16.6.117:28018/tigase
muc/shiku-room-db=tigase.shiku.db.MongoShikuMucRoomRepository
muc/shiku-room-db-uri=mongodb://172.16.6.117:28018/imRoom
muc/default_room_config/muc#maxhistoryfetch=100
muc/muc-lock-new-room[B]=false
--comp-name-pubsub = pubsub
--comp-class-pubsub = tigase.pubsub.PubSubComponent

# 视讯消息归档组件
--comp-name-3=shiku-message-archive
--comp-class-3=tigase.shiku.ShikuMessageArchiveComponent
shiku-message-archive/archive-repo-uri=mongodb://172.16.6.117:28018/tigase
shiku-message-archive/archive-repo-class=tigase.shiku.db.MongoShikuMessageArchiveRepository
shiku-message-archive/muc-repo-uri=mongodb://172.16.6.117:28018/imRoom
shiku-message-archive/muc-msgs-split-method=year/month/day
shiku-message-archive/msgs-split-method=year/month/day

sess-man/incoming-filters=tigase.shiku.ShikuKeywordFilter
##message-router/incoming-filters=tigase.shiku.ShikuKeywordFilter
#c2s/incoming-filters=tigase.shiku.ShikuKeywordFilter

```

3、编辑tigase-dockerfile 文件，写入如下内容

注：tigase-server-7.1.3-b4482 为tigase-server 的部署文件的目录 5222 端口用于Android、ios、PC 等客户端连接使用，5280 端口用于WEB 版连接使用，如没有 WEB 版5280 端口可不用

```

FROM java:8
VOLUME /opt/logs
ADD ./tigase-server-7.1.3-b4482/ /opt/tigase-server
RUN chmod -R 755 /opt
EXPOSE 5222
EXPOSE 5280
ENTRYPOINT cd /opt/tigase-server; java -version; ./scripts/tigase.sh run
etc/tigase.conf; wait $!

```


4、通过dockerfile 文件构建镜像

```
docker build -t tigase-server -f tigase-dockerfile ./
```

5、通过镜像启动容器

```
docker run -d -p 5222:5222 -p 5280:5280 --name tigase-server tigase-server
```

6. Docker 创建RocketMq容器

1、拉取rocketmq-4.3.2 的镜像

```
docker pull rocketmqinc/rocketmq:4.3.2
```

```
[root@izbpla5bxfhn22cit0b97wz rocketmq-4.3.2]# docker pull rocketmqinc/rocketmq:4.3.2
4.3.2: Pulling from rocketmqinc/rocketmq
7dc0dca2b151: Pull complete
cc5d45019647: Pull complete
d470c49d7d88: Pull complete
6add7a0a8ecc: Pull complete
946ac119516c: Pull complete
d3a353d23f99: Pull complete
3f9e29c39b13: Pull complete
Digest: sha256:cbfe07bce51641c0e6e4a86d77c5169fb5c7399789d01b1dc1db773bceec9256
Status: Downloaded newer image for rocketmqinc/rocketmq:4.3.2
```

2、在宿主机创建目录

```
mkdir -p /data/namesrv/logs
mkdir -p /data/namesrv/store
mkdir -p /data/broker/logs
mkdir -p /data/broker/store
```

3、使用镜像启动 NameServer 容器

```
docker run -d -p 9876:9876 -v /data/namesrv/logs:/root/logs -v
/data/namesrv/store:/root/store --name rmqnamesrv rocketmqinc/rocketmq:4.3.2 sh
mqnamesrv
```

4、使用镜像启动broker 容器（说明：**-Xms512m** 等内存值可根据机器实际内存值进行调整）

```
docker run -d -p 10911:10911 -p 10909:10909 -v /data/broker/logs:/root/logs -v
/data/broker/store:/root/store --name rmqbroker --link rmqnamesrv:namesrv -e
"Namesrv_Addr=namesrv:9876" -e "JAVA_OPT=${JAVA_OPT}" -server -Xms512m -Xmx512m -
Xmn256m -XX:PermSize=128m -XX:MaxPermSize=128m" rocketmqinc/rocketmq:4.3.2 sh
mqbroker
```

7. Docker 创建push容器

1、在push的部署文件push中创建push_dockerfile文件，写入如下内容

```
FROM java:8
VOLUME /opt/push/logs
COPY application.properties /opt/push/application.properties
COPY *.p12 /opt/push/
COPY sixth-hawk-164509-firebase-adminsdk-342gn-465351f0ef.json /opt/mac-pro-push/sixth-hawk-164509-firebase-adminsdk-342gn-465351f0ef.json
ADD push.war /opt/push/push.war
RUN bash -c 'touch /opt/push/push.war'
ENTRYPOINT ["java", "-jar", "/opt/push/push-1.0.war", "--spring.config.location=/opt/push/application.properties"]
```

说明：这里的application.properties 从push目录里拷贝

.p12 文件为ios 推送证书文件

sixth-hawk-164509-firebase-adminsdk-342gn-465351f0ef.json 为Google 推送需要的文件

push.war 为 push 服务部署包

2、通过dockerfile 文件构建镜像

```
docker build -t mac-pro-push -f push_dockerfile ./
```

3、通过镜像启动容器

```
docker run -d -e "MONGODB_ADDR=192.168.0.151:27107" -e "NAMESRV_ADDR=192.168.0.155:9876" -e "XMPP_HOST=192.168.0.155" -e "XMPP_SERVERNAME=192.168.0.155" -e "REDIS_ADDR=redis://192.168.0.155:6379" --name push-server push
```

8.Docker 创建xmpp-push 容器

1、在xmpp-push的部署文件xmpp-push中创建 xmpp-push_dockerfile文件，写入如下内容

```
FROM java:8
VOLUME /opt/xmpp-push/logs
COPY application.properties /opt/xmpp-push/application.properties
ADD xmpp-push-0.0.1-SNAPSHOT.war /opt/xmpp-push/xmpp-push-0.0.1-SNAPSHOT.war
RUN bash -c 'touch /opt/xmpp-push/xmpp-push-0.0.1-SNAPSHOT.war'
ENTRYPOINT ["java", "-jar", "/opt/xmpp-push/xmpp-push-0.0.1-SNAPSHOT.war", "--spring.config.location=/opt/xmpp-push/application.properties"]
```

说明：这里的application.properties 从 conf_file/message-push目录里拷贝

xmpp-push-0.0.1-SNAPSHOT.war 为 xmpp-push 服务的部署包

2、通过dockerfile 文件构建镜像

```
docker build -t message-push -f message-push_dockerfile ./
```

3、通过镜像启动容器

```
docker run -d -e "MONGODB_ADDR=192.168.0.151:27107" -e  
"NAMESRV_ADDR=192.168.0.151:9876" -e "XMPP_HOST=192.168.0.151" -e  
"XMPP_SERVERNAME=im.mac-pro.co" -e "REDIS_ADDR=redis://192.168.0.151:6379" --name xmpp-  
push-server xmpp-push
```

9.Docker 创建Upload容器

1、在upload的部署文件upload中创建 upload_dockerfile文件，写入如下内容

```
FROM java:8  
VOLUME /opt/upload/logs  
COPY application.properties /opt/upload/application.properties  
ADD upload-2.0.war /opt/upload/upload-2.0.war  
RUN bash -c 'touch /opt/upload/upload-2.0.war'  
RUN mkdir -p /data/www/resources  
ENTRYPOINT ["java", "-jar", "/opt/upload/upload-2.0.war", "--  
spring.config.location=/opt/upload/application.properties"]
```

说明：这里的application.properties 从 conf_file/upload目录里拷贝
upload-2.0.war 为 upload 服务的部署包

2、通过dockerfile 文件构建镜像

```
docker build -t upload -f upload_dockerfile ./
```

3、在宿主机创建文件存储目录，挂载到容器(可将下面命令复制后一次执行)

```
mkdir -p /data/www/resources  
cd /data/www/resources  
mkdir audio  
mkdir avatar  
mkdir avatar/o  
mkdir avatar/t  
mkdir avatar_r
```



```
mkdir avatar_r/o
mkdir avatar_r/t
mkdir gift
mkdir image
mkdir image/o
mkdir image/t
mkdir other
mkdir preview
mkdir temp
mkdir u
mkdir video
```

4、通过镜像启动容器

```
docker run -d -p 8088:8088 -v /data/www/resources:/data/www/resources" -e
"MONGODB_URL=mongodb://192.168.0.151:27107" --name upload-server upload
```

10.Docker 创建Nginx容器

说明：这里Nginx 主要提供文件访问服务，需要和 Upload 放在同一宿主机，以便能读取到上传的文件

1、拉取官方镜像

```
docker pull nginx
```

2、在宿主机创建目录，编辑配置文件

```
mkdir -p /data/nginx/logs
mkdir -p /data/nginx/conf
cd /data/nginx/conf
```

vim nginx.conf

写入如下内容：

```
user root;
worker_processes 1;
pid /run/nginx.pid;

events {
    worker_connections 1024;
}

http {
```

```
include mime.types;
default_type application/octet-stream;
access_log /var/log/nginx/access.log;
error_log /var/log/nginx/error.log;

sendfile on;
keepalive_timeout 65;
server{
    listen 8080;
    charset utf-8;
    location / {
        if ($http_referer ~* ".php") {
            return 403;
        }
        root /www/resources;
        expires 5d;
    }
}
```

3、通过镜像启动容器

```
docker run -p 8080:8080 --name nginx -v /data/www/resources:/www/resources -v
/data/nginx/conf/nginx.conf:/etc/nginx/nginx.conf -v /data/nginx/logs:/var/log/nginx -d
nginx
```

三、服务器管理、维护

1.修改调整服务器最大连接数

使用以下命令查看当前最大连接数：（默认为1024，需要改大）

```
[root@mac-pro ~]# ulimit -n
```

1024

修改以下配置文件：

1.1 编辑 /etc/security/limits.conf

```
[root@mac-pro~]# vim /etc/security/limits.conf
```

```
*    soft  nofile  204800
*    hard  nofile  204800
*    soft  nproc   204800
*    hard  nproc   204800
```

在配置文件中添加以上内容

1.2 编辑 /etc/pam.d/login

```
[root@mac-pro~]# vim /etc/pam.d/login
```

session required pam_limits.so

在配置文件中添加以上内容

将以上保存好，然后重启服务器，再使用ulimit -n

```
[root@mac-pro~]# ulimit -n
```

204800

2 查看监听的端口

当某个服务出现不能正常访问，使用如下命令会查看对应的端口是否处于监听状态

```
#[root@mac-pro~]# netstat -lntp
```

```
[root@337b81dcc75c resources]# netstat -lntp
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Program name
tcp        0      0 0.0.0.0:80             0.0.0.0:*               LISTEN      50/nginx: master pr
tcp        0      0 0.0.0.0:28018          0.0.0.0:*               LISTEN      25/mongod
tcp        0      0 127.0.0.1:6388         0.0.0.0:*               LISTEN      45/redis-server 127
tcp        0      0 0.0.0.0:22            0.0.0.0:*               LISTEN      41/sshd
tcp        0      0 0.0.0.0:8089          0.0.0.0:*               LISTEN      50/nginx: master pr
tcp6       0      0 :::8080               :::*                   LISTEN      425/java
tcp6       0      0 :::5269               :::*                   LISTEN      75/java
tcp6       0      0 :::22                 :::*                   LISTEN      41/sshd
tcp6       0      0 :::8092               :::*                   LISTEN      55/java
tcp6       0      0 :::5280               :::*                   LISTEN      75/java
tcp6       0      0 :::9090               :::*                   LISTEN      75/java
tcp6       0      0 :::5222               :::*                   LISTEN      75/java
tcp6       0      0 :::5223               :::*                   LISTEN      75/java
tcp6       0      0 :::8009               :::*                   LISTEN      425/java
tcp6       0      0 :::5290               :::*                   LISTEN      75/java
```

各个服务对应端口说明：

服务名称	描述	端口号使用情况
Tigase-server	xmpp 通讯服务	客户端使用5222，Web版使用5280端口
upload	文件上传服务	8088
mongodb	数据库	27017
Redis	缓存服务	6379
Nginx	主要用于文件访问时的目录映射	8080
fastDfs	分布式文件存储服务	tracker 服务使用 22122 端口 Storage 服务使用 23000端口