CDN部署运维文档

**内部参考文档**

请参考 “CDN项目分析.docx” 文档的架构图

操作系统版本 centos 5.5 x64

**系统基础配置与程序安装** 为节点服务器必须安装和配置的列表

**服务器上架接网卡必须接第一张网卡，以便统一配置**

**在配置需要填写的字段里面，请不要使用中文，除了描述信息之外**

# 系统基础配置与程序安装

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| **项目** | **安装与配置** |
| Iptables配置 | 根据具体服务器所开放的服务配置  **SSH端口增加管理机白明白**  **文件CDN 网站CDN 服务器管理服务端 访问**  参考 [服务器管理服务端双线](#_服务器列表)   1. SSH端口为7997   #SSH管理机白名单  -A RH-Firewall-1-INPUT -s 121.9.13.180 -m state --state NEW -m tcp -p tcp --dport 7997 -j ACCEPT  -A RH-Firewall-1-INPUT -s s.efly.cc -m state --state NEW -m tcp -p tcp --dport 7997 -j ACCEPT  -A RH-Firewall-1-INPUT -s s.efly.cc -m state --state NEW -m tcp -p tcp --dport 7997 -j ACCEPT  #文件，网站CDN管理服务器白名单  -A RH-Firewall-1-INPUT -s 119.120.92.30 -p tcp -m state --state NEW -m tcp --dport 7997 -j ACCEPT  -A RH-Firewall-1-INPUT -s 112.90.180.30 -p tcp -m state --state NEW -m tcp --dport 7997 -j ACCEPT |
| 关闭selinux | setenforce 0 |
| SNMP监控 | 安装snmp  yum -y install net-snmp.x86\_64  配置snmp  vim /etc/snmp/snmpd.conf  添加  view all included .1  access notConfigGroup "" any noauth exact systemview none none  修改为  access notConfigGroup "" any noauth exact all none none  重启snmp服务  /etc/init.d/snmpd restart  将服务器添加到cacti监控 |
| 关闭sendmail服务 | **因为我们的服务器会有crontab定时执行，这样如果不关闭sendmail功能的话会产生很多小文件，同时每个crontab的指令后面加上 > /dev/null 2>&1 把信息去除** |
| 时间同步 | yum -y install ntp.x86\_64  更新一下时间  /usr/sbin/ntpdate 0.centos.pool.ntp.org 1.centos.pool.ntp.org 2.centos.pool.ntp.org  加入开机启动脚本更新时间  vim /etc/rc.local  /usr/sbin/ntpdate 0.centos.pool.ntp.org 1.centos.pool.ntp.org 2.centos.pool.ntp.org> /dev/null 2>&1  **设置MySQL开机自启动** |
| 系统连接配置  （节点服务器） | vim /etc/sysctl.conf  添加  ~~net.ipv4.ip\_conntrack\_max = 6553600~~**~~这个新内核已经没有了~~**  net.ipv4.tcp\_syncookies = 1  net.ipv4.tcp\_max\_syn\_backlog = 8192  net.ipv4.tcp\_syn\_retries = 2  net.ipv4.tcp\_synack\_retries = 2  net.ipv4.tcp\_tw\_reuse=1  net.ipv4.tcp\_tw\_recycle=1  net.ipv4.tcp\_fin\_timeout = 10  fs.file-max = 65535  net.ipv4.tcp\_timestamps = 0  net.nf\_conntrack\_max = 655360  net.netfilter.nf\_conntrack\_max = 655360  sysctl -p /etc/sysctl.conf |
| MySQL | **网站CDN不用部署MySQL数据库，仅文件CDN使用**  安装MySQL  yum -y install mysql-server.x86\_64  安装完后启动mysql服务后进入mysql设置密码  /etc/init.d/mysqld start&& mysql  use mysql;  UPDATE user SET Password = PASSWORD('rjkj@rjkj') WHERE user = 'root';  FLUSH PRIVILEGES; |
| Python | 系统默认自带  安装JSON模块  yum -y install python-simplejson.x86\_64  安装MySQL模块  yum -y install MySQL-python.x86\_64 |
| Libpcap | **网站CDN不用部署**  网络抓包库，统计端口流量程序需要用到这个库  无论在32位还是64位Centos都安装32位的开发库，64位的开发库有问题，会影响端口流量统计程序  yum -y install libpcap-devel.i386 |
| 安装svn | yum -y install subversion.x86\_64 |
| 更新开机执行脚本 | wget [http://s.efly.cc/webadmin/server/rc.local](http://112.90.177.108/webadmin/server/rc.local) -O /etc/rc.local  chmod +x /etc/rc.local |

# 文件CDN部署(新上架机器的配置)

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| 保证开机自动运行mysqld服务  **为文件统计服务器iptable开通80端口，3306端口**  **为超级节点开通873端口**  #iptable增加下载端口  -A RH-Firewall-1-INPUT -p tcp -m state --state NEW -m tcp --dport 7000:7800 -j ACCEPT  -A RH-Firewall-1-INPUT -p tcp -m state --state NEW -m tcp --dport 8000:9000 -j ACCEPT  cd /opt  chmod +x /opt/cachemgr/\*  chmod +x /opt/cdn\_file/\*.\*  chmod +x /opt/nginx\_tools/\*.\*  更新客户数据库同步  wget <http://s1.efly.cc/webadmin/server/nginx_tools_config> -O /opt/nginx\_tools/config  #配置nginx日志统计，下载部分  cd /opt  mkdir /opt/nginx\_log  mkdir /opt/nginx\_tools  下载nginx最新的**stable**稳定源码包包  <http://nginx.org/en/download.html>  tar zxvf nginx-xxxx.tar.gz  cd nginx-xxxx  ./configure --without-http\_rewrite\_module --prefix=/opt/nginx  make && make install  下载最新配置文件  wget <http://s1.efly.cc/webadmin/server/nginx.conf> -O /opt/nginx/conf/nginx.conf  检查配置文件  /opt/nginx/sbin/nginx -t-c /opt/nginx/conf/nginx.conf  启动nginx服务  /opt/nginx/sbin/nginx -c /opt/nginx/conf/nginx.conf  重启nginx服务  /opt/nginx/sbin/nginx -s reload  下载最新的客户列表统计脚本  wget [http://s.efly.cc/webadmin/server/file\_client\_flux\_db.php -O /tmp/client\_db.txt](http://s.efly.cc/webadmin/server/file_client_flux_db.php%20-O%20/tmp/client_db.txt)  执行/tmp/client\_db.txt里面的sql语句，创建现有客户数据库  **添加iptable策略，数据中心，文件流量统计 3306端口 80端口**  **添加webadmin对应的节点服务器** |
| 将开机启动squid,haproxy代码添加到开机脚本/etc/rc.local  /opt/nginx/sbin/nginx  **/opt/rsync/run\_client.sh &**  ~~/opt/cdn\_file/run\_file\_walk.sh &~~ |

# 文件CDN部署Cache

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| cd /opt  mkdir nginx\_cache  mkdir -p nginx\_cache\_data/path  mkdir -p nginx\_cache\_data/temp  #配置定时执行脚本  mkdir /opt/node\_task  cd /opt/node\_task  wget <http://cdnmgr.efly.cc/cdn_node_mgr/node_file/build_node_task.sh>&& chmod +x /bin/sh build\_node\_task.sh  /bin/sh build\_node\_task.sh  #添加crontab  ( crontab -l; echo "\*/1 \* \* \* \* /opt/node\_task/node\_general.sh > /dev/null 2>&1" ) | crontab  (crontab -l ; echo "0 1 \* \* \* /opt/node\_task/del\_node\_task\_log.sh > /dev/null 2>&1") | crontab  cd nginx\_cache  wget http://nginx.org/download/nginx-1.4.2.tar.gz  wget http://labs.frickle.com/files/ngx\_cache\_purge-2.1.tar.gz  yum install -y pcre-devel.x86\_64  yum -y install perl-devel perl-ExtUtils-Embed  tar zxvf nginx-1.4.2.tar.gz  tar zxvf ngx\_cache\_purge-2.1.tar.gz  cd nginx-1.4.2  ./configure --add-module=../ngx\_cache\_purge-2.1--with-http\_perl\_module--with-http\_secure\_link\_module--prefix=/opt/nginx\_cache/nginx  make && make install  cd /opt/nginx\_cache  #下载nginx cache 配置文件的头部模板  #修改缓存目录大小，每台机器配置不一样  wget http://s1.efly.cc/webadmin/server/cdn\_hotfile\_nginx.conf.base -O /opt/nginx\_cache/cdn\_hotfile\_nginx.conf.base  #下载nginx cache配置文件合并脚本  wget <http://s1.efly.cc/webadmin/server/nginx_cache_conf_make.sh> -O /opt/nginx\_cache/nginx\_cache\_conf\_make.sh  chmod +x nginx\_cache\_conf\_make.sh  #执行脚本生成配置文件  /opt/nginx\_cache/nginx\_cache\_conf\_make.sh  /opt/nginx\_cache/nginx/sbin/nginx -t  运行  /opt/nginx\_cache/nginx/sbin/nginx  设置开机运行  ~~#下载定时推送脚本，并设置crontab执行~~  ~~wget http://s.efly.cc/webadmin/server/push.sh -O /opt/nginx\_cache/push.sh~~  ~~chmod +x /opt/nginx\_cache/push.sh~~  ~~\*/1 \* \* \* \* /opt/nginx\_cache/push.sh > /dev/null 2>&1~~ |

# 文件CDN运维(客户的管理)

管理后台地址，密钥（由其它途径提供不在文档列出）

**文件CDN客户分配的端口范围从8000~9000，如果新增客户请注意现有客户列表，需找未被使用的端口，如果是删除现有客户请填写好对应端口，新增或者删除客户后请及时更新客户列表**

填写基本信息描述

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| **字段** | **描述** |
| **客户名称** | 该名称用于创建FTP账号和管理后台账号 |
| **FTP密码** | FTP账号密码 |
| **Nginx端口** | 文件CDN客户端口，根据现有客户列表填写或者分配8000~9000 |
| **描述** | 该客户的文字信息 |

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| **新建客户流程** | |
| 创建FTP账号 | 1. 创建FTP账号 |
| Nginx配置 | 1. 配置Nginx 2. 更新Nginx 3. 检查Nginx 4. 重启Nginx |
| ~~端口统计配置~~ | 1. ~~配置端口统计 不需要执行~~ 2. ~~更新端口统计 不需要执行~~ |
| 流量统计配置 | 1. 创建数据库 2. 配置流量统计 3. 更新流量统计 |
| 管理平台设置 | A．新建客户 |

# 网站CDN节点统计服务器部署（新上架机器的配置）

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| 关闭syslogd，关闭开机启动syslogd  #64bit  yum install -y python-simplejson.x86\_64  #32bit  yum install -y python-simplejson.i686  yum install -y python-simplejson.i386  cd /opt  mkdir -p /opt/haproxy\_log  mkdir -p /opt/haproxy\_tools  mkdir -p /opt/squid\_tools  下载当前cdn域名列表文件  /usr/bin/wget [http://cdninfo.efly.cc/cdnmgr/cdn\_web/cdn\_web\_client\_hostname\_list.php -O /opt/squid\_tools/hostname\_list.txt](http://cdninfo.efly.cc/cdnmgr/cdn_web/cdn_web_client_hostname_list.php%20-O%20/opt/squid_tools/hostname_list.txt)  添加到crontab  \*/5 \* \* \* \* /usr/bin/wget http://cdninfo.efly.cc/cdnmgr/cdn\_web/cdn\_web\_client\_hostname\_list.php -O /opt/squid\_tools/hostname\_list.txt  \*/5 \* \* \* \* /opt/squid\_tools/run\_squid\_syslogd.sh > /dev/null 2>&1  #haproxy log  0 2 \* \* \* /opt/haproxy\_tools/create\_day\_log\_packet.sh  \*/5 \* \* \* \* /opt/haproxy\_tools/run\_haproxy\_syslogd.sh > /dev/null 2>&1 &  #配置nginx下载haproxy日志文件  wget http://nginx.org/download/nginx-1.0.13.tar.gz  ./configure --without-http\_rewrite\_module --prefix=/opt/nginx  make && make install  /opt/nginx/sbin/nginx -t -c /opt/nginx/conf/nginx.conf  /opt/nginx/sbin/nginx -c /opt/nginx/conf/nginx.conf  **开机自动开启nginx**  vim /etc/rc.local  /opt/nginx/sbin/nginx -c /opt/nginx/conf/nginx.conf  后台添加统计server\_list记录  **添加iptable策略，数据中心，网站流量统计** |

# 网站CDN节点部署（新上架机器的配置）

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| 保证开机自动运行syslogd服务  **为网站统计服务器iptable开通80端口**  ~~cd /opt~~  ~~svn export svn://121.9.211.126/cachemgr/dist/server/cachemgr cachemgr~~  ~~svn export svn://121.9.211.126/cachemgr/dist/server/haproxy\_toolshaproxy\_tools~~  ~~用户名，密码123cdndist~~  ~~chmod +x /opt/cachemgr/\*~~  ~~chmod +x /opt/haproxy\_tools/\*.\*~~  下载最新的haproxy源码包  <http://haproxy.1wt.eu/>  下载最新的squid源码包 **选择版本3的squid**  <http://www.squid-cache.org/Versions/>  编译安装haproxy  tar zxvf haproxy-xxxx.tar.gz  cd haproxy-xxxx  #编译&&安装  make TARGET=linux26&& make PREFIX=/opt/haproxy install  ~~配置haproxy日志~~  ~~vim /etc/syslog.conf~~  ~~加入了~~  ~~local3.\* /var/log/haproxy.log~~  ~~touch /var/log/haproxy.log~~  ~~chown nobody:nobody /var/log/haproxy.log~~  ~~vim /etc/sysconfig/syslog~~  ~~SYSLOGD\_OPTIONS="-m 0 -r" 修改成这样，添加了-r~~  ~~重启syslog~~  ~~/etc/init.d/syslog restart~~  **Haproxy的配置文件haproxy.cfg存放在专门存放配置文件的服务器，每次更新都是从服务器下载到本地，存放到/opt/haproxy/sbin/目录下**  wget http://s1.efly.cc/webadmin/server/haproxy\_ex.cfg -O /opt/haproxy/sbin/haproxy.cfg  启动haproxy  /opt/haproxy/sbin/haproxy -f /opt/haproxy/sbin/haproxy.cfg  修改日志配置部分  **log global**  **log 统计服务器IP地址:515 local3**  **option httplog**  **option dontlognull**  重启haproxy，适合于重读配置文件  /opt/haproxy/sbin/haproxy -f /opt/haproxy/sbin/haproxy.cfg -p /var/run/haproxy-private.pid -sf $(</var/run/haproxy-private.pid)  编译安装squid  cd /opt  tar zxvf squid-xxxx.tar.gz  cd squid-xxxx  ./configure --prefix=/opt/squid  make && make install  cd /opt  mkdir cdn\_client  cp /opt/squid/sbin/squid /opt/cdn\_client/  #配置定时执行脚本  mkdir /opt/node\_task  cd /opt/node\_task  wget <http://cdnmgr.efly.cc/cdn_node_mgr/node_file/build_node_task.sh>&& chmod +x /bin/sh build\_node\_task.sh  /bin/sh build\_node\_task.sh  #添加crontab  ( crontab -l; echo "\*/1 \* \* \* \* /opt/node\_task/node\_general.sh > /dev/null 2>&1" ) | crontab  (crontab -l ; echo "0 1 \* \* \* /opt/node\_task/del\_node\_task\_log.sh > /dev/null 2>&1") | crontab  wgethttp://s1.efly.cc/webadmin/server/create\_cdn\_client\_ex.sh-O /opt/cdn\_client/create\_cdn\_client\_ex.sh && chmod +x /opt/cdn\_client/create\_cdn\_client\_ex.sh  wget http://s1.efly.cc/webadmin/server/squid\_ex.conf -O /opt/cdn\_client/squid\_ex.conf -O /opt/cdn\_client/squid\_ex.conf  修改squid\_ex.conf RJ-YZTEL-CDN-125  修改 syslog.conf  \*.info;mail.none;authpriv.none;cron.none /var/log/messages  改成,不记录info级别日志  mail.none;authpriv.none;cron.none /var/log/messages  local4.info @统计日志服务器IP  重启syslogd  多少个cpu就多少个squid进程,根据硬盘，内存指定缓存目录大小  **注意电信节点和网通节点的对应命令**  //**电信**  /opt/cdn\_client/create\_cdn\_client\_ex.sh squid1 4001 "116.28.65.245 116.28.64.162 119.145.139.249" 1000  /opt/cdn\_client/create\_cdn\_client\_ex.sh squid2 4002 "116.28.65.245 116.28.64.162 119.145.139.249" 1000  /opt/cdn\_client/create\_cdn\_client\_ex.sh squid3 4003 "116.28.65.245 116.28.64.162 119.145.139.249" 1000  /opt/cdn\_client/create\_cdn\_client\_ex.sh squid4 4004 "116.28.65.245 116.28.64.162 119.145.139.249" 1000  //**网通**  /opt/cdn\_client/create\_cdn\_client\_ex.sh squid1 4001 "112.90.178.231 112.90.177.66 120.31.61.242" 1000  /opt/cdn\_client/create\_cdn\_client\_ex.sh squid2 4002 "112.90.178.231 112.90.177.66 120.31.61.242" 1000  /opt/cdn\_client/create\_cdn\_client\_ex.sh squid3 4003 "112.90.178.231 112.90.177.66 120.31.61.242" 1000  /opt/cdn\_client/create\_cdn\_client\_ex.sh squid4 4004 "112.90.178.231 112.90.177.66 120.31.61.242" 1000  初始化squid  /opt/cdn\_client/squid1\_squid/squid -f /opt/cdn\_client/squid1\_squid/squid.conf -z  /opt/cdn\_client/squid2\_squid/squid -f /opt/cdn\_client/squid2\_squid/squid.conf -z  /opt/cdn\_client/squid3\_squid/squid -f /opt/cdn\_client/squid3\_squid/squid.conf -z  /opt/cdn\_client/squid4\_squid/squid -f /opt/cdn\_client/squid4\_squid/squid.conf -z  启动squid  /opt/cdn\_client/squid4\_squid/squid -f /opt/cdn\_client/squid4\_squid/squid.conf  /opt/cdn\_client/squid3\_squid/squid -f /opt/cdn\_client/squid3\_squid/squid.conf  /opt/cdn\_client/squid2\_squid/squid -f /opt/cdn\_client/squid2\_squid/squid.conf  /opt/cdn\_client/squid1\_squid/squid -f /opt/cdn\_client/squid1\_squid/squid.conf  将开机启动squid,haproxy代码添加到开机脚本/etc/rc.local  for squidpath in /opt/cdn\_client/\*\_squid  do  squidcmd="$squidpath/squid -f $squidpath/squid.conf"  echo "$squidcmd"|bash  done  /opt/haproxy/sbin/haproxy -f /opt/haproxy/sbin/haproxy.cfg  **添加webadmin对应的节点服务器** |
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# Centos 5.5 PHP 5.1安装json库

wget http://pecl.php.net/get/json -O json-tgz

tar -xf json-tgz

cd json-1

phpize

./configure

make

make install

创建json配置文件

[root@RJ-XX-webstats php.d]# cat /etc/php.d/json.ini

; Enable mysql extension module

extension=json.so

重启http服务

/etc/init.d/httpd restart

# Cacti操作

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| 点击 console 然后 在 Management 列点击 Devices  点击右上角 Add按钮  输入监控服务器的IP  选择为Local Linux Machine  选择SNMP Version2  最后点击右下角按钮  在Devices列表选择刚才添加的服务器  选择CPU使用率  然后  网卡流量监控  然后  其它的全部删除，只留这两个  点击右上角  把CPU和网卡流量全部选上，然后  选择64Bits  最后点击  最后把新添加的服务添加到对应的Graph Tress  点击Console 然后点击 Graph Trees  选择对应的分类然后点击右上角  如果需要新建分类则直接点击右上角输入简单信息后然后点击右下角即可  进入分类列表后  选择Host  选择刚才新添加的IP，然后点击右下角即可 |