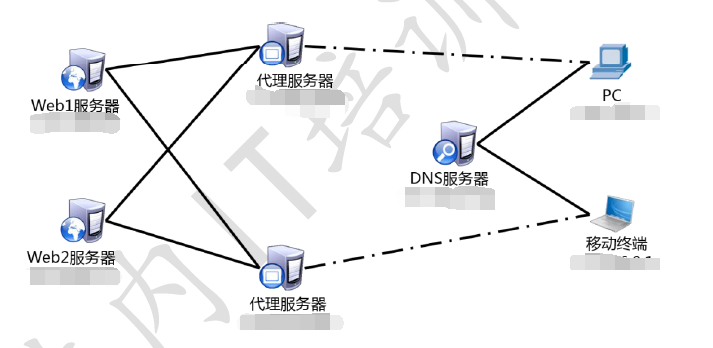
搭建CDN内容分发系统

环境：rhel7.5虚拟机7台，关闭防火墙，SELinux，搭建好yum源



配置： pc1 pc1.tedu.cn 192.168.4.1

pc2 pc2.tedu.cn 192.168.4.2

web1 web1.tedu.cn 192.168.4.11

web2 web2.tedu.cn 192.168.4.12

squid1 squid1.tedu.cn 192.168.4.21

squid2 squid2.tedu.cn 192.168.4.22

dns dns.tedu.cn 192.168.4.30

#搭建web服务器

[root@web1 ~]# yum -y install httpd

[root@web1 ~]# echo web1 > /var/www/html/index.html

[root@web1 ~]# systemctl start httpd

[root@web1 ~]# curl http://127.0.0.1

web1

[root@web2 ~]# yum -y install httpd

[root@web2 ~]# echo web2 > /var/www/html/index.html

[root@web2 ~]# systemctl start httpd

[root@web2 ~]# curl http://127.0.0.1

web2

#搭建squid反向代理

[root@squid1 ~]# yum -y install squid

[root@squid1 ~]# vim /etc/squid/squid.conf

[root@squid1 ~]# cat /etc/squid/squid.conf | grep -v ^$ | grep -v ^#

acl localnet src 10.0.0.0/8 # RFC1918 possible internal network

acl localnet src 172.16.0.0/12 # RFC1918 possible internal network

acl localnet src 192.168.0.0/16 # RFC1918 possible internal network

acl localnet src fc00::/7 # RFC 4193 local private network range

acl localnet src fe80::/10 # RFC 4291 link-local (directly plugged) machines

acl SSL\_ports port 443

acl Safe\_ports port 80 # http

acl Safe\_ports port 21 # ftp

acl Safe\_ports port 443 # https

acl Safe\_ports port 70 # gopher

acl Safe\_ports port 210 # wais

acl Safe\_ports port 1025-65535 # unregistered ports

acl Safe\_ports port 280 # http-mgmt

acl Safe\_ports port 488 # gss-http

acl Safe\_ports port 591 # filemaker

acl Safe\_ports port 777 # multiling http

acl CONNECT method CONNECT

http\_access deny !Safe\_ports

http\_access deny CONNECT !SSL\_ports

http\_access allow localhost manager

http\_access deny manager

http\_access allow localnet

http\_access allow localhost

http\_access deny all

http\_port 80 vhost

visible\_hostname squid1.tedu.cn

cache\_peer 192.168.4.11 parent 80 0 originserver

cache\_peer 192.168.4.12 parent 80 0 priginserver

cache\_mem 128 MB

cache\_dir ufs /var/spool/squid 100 16 256

coredump\_dir /var/spool/squid

refresh\_pattern ^ftp: 1440 20% 10080

refresh\_pattern ^gopher: 1440 0% 1440

refresh\_pattern -i (/cgi-bin/|\?) 0 0% 0

refresh\_pattern . 0 20% 4320

[root@squid1 ~]# systemctl start squid

[root@squid1 ~]# netstat -antpu | grep squid

tcp6 0 0 :::80 :::\* LISTEN 1314/(squid-1)

udp 0 0 0.0.0.0:43831 0.0.0.0:\* 1314/(squid-1)

udp6 0 0 :::37416 :::\* 1314/(squid-1)

[root@squid1 ~]# curl http://127.0.0.1

web1

[root@squid2 ~]# yum -y install squid

[root@squid2 ~]# vim /etc/squid/squid.conf

[root@squid2 ~]# cat /etc/squid/squid.conf | grep -v ^$ | grep -v ^#

acl localnet src 10.0.0.0/8 # RFC1918 possible internal network

acl localnet src 172.16.0.0/12 # RFC1918 possible internal network

acl localnet src 192.168.0.0/16 # RFC1918 possible internal network

acl localnet src fc00::/7 # RFC 4193 local private network range

acl localnet src fe80::/10 # RFC 4291 link-local (directly plugged) machines

acl SSL\_ports port 443

acl Safe\_ports port 80 # http

acl Safe\_ports port 21 # ftp

acl Safe\_ports port 443 # https

acl Safe\_ports port 70 # gopher

acl Safe\_ports port 210 # wais

acl Safe\_ports port 1025-65535 # unregistered ports

acl Safe\_ports port 280 # http-mgmt

acl Safe\_ports port 488 # gss-http

acl Safe\_ports port 591 # filemaker

acl Safe\_ports port 777 # multiling http

acl CONNECT method CONNECT

http\_access deny !Safe\_ports

http\_access deny CONNECT !SSL\_ports

http\_access allow localhost manager

http\_access deny manager

http\_access allow localnet

http\_access allow localhost

http\_access deny all

http\_port 80 vhost

http\_port 80 vhost

visible\_hostname squid1.tedu.cn

cache\_peer 192.168.4.11 parent 80 0 originserver

cache\_peer 192.168.4.12 parent 80 0 priginserver

cache\_mem 128 MB

cache\_dir ufs /var/spool/squid 100 16 256

coredump\_dir /var/spool/squid

refresh\_pattern ^ftp: 1440 20% 10080

refresh\_pattern ^gopher: 1440 0% 1440

refresh\_pattern -i (/cgi-bin/|\?) 0 0% 0

refresh\_pattern . 0 20% 4320

[root@squid2 ~]# systemctl start squid

[root@squid2 ~]# netstat -antpu | grep squid

tcp6 0 0 :::80 :::\* LISTEN 1405/(squid-1)

udp 0 0 0.0.0.0:39168 0.0.0.0:\* 1405/(squid-1)

udp6 0 0 :::60093 :::\* 1405/(squid-1)

[root@squid2 ~]# curl http://127.0.0.1

web1

[root@dns ~]# yum -y install bind bind-chroot

[root@dns ~]# vim /etc/named.conf

[root@dns ~]# cat /etc/named.conf

options {

directory "/var/named";

};

acl client1 {

192.168.4.1;

};

acl client2 {

192.168.4.2;

};

view "zone1" {

match-clients { client1; };

zone "tedu.cn" IN {

type master;

file "tedu.cn.zone1";

};

};

view "zone2" {

match-clients { client2; };

zone "tedu.cn" IN {

type master;

file "tedu.cn.zone2";

};

};

[root@dns ~]# named-checkconf /etc/named.conf

[root@dns ~]# cd /var/named/

[root@dns named]# cp -p named.localhost tedu.cn.zone1

[root@dns named]# ll tedu.cn.zone1

-rw-r----- 1 root named 152 6月 21 2007 tedu.cn.zone1

[root@dns named]# vim tedu.cn.zone1

[root@dns named]# named-checkzone tedu.cn tedu.cn.zone1

zone tedu.cn/IN: loaded serial 0

OK

[root@dns named]# cp -p tedu.cn.zone1 tedu.cn.zone2

[root@dns named]# vim tedu.cn.zone2

[root@dns named]# named-checkzone tedu.cn tedu.cn.zone2

zone tedu.cn/IN: loaded serial 0

OK

[root@dns named]# cat tedu.cn.zone1

$TTL 1D

@ IN SOA @ rname.invalid. (

0 ; serial

1D ; refresh

1H ; retry

1W ; expire

3H ) ; minimum

NS dns

dns A 192.168.4.30

squid1 A 192.168.4.21

squid2 A 192.168.4.22

web1 A 192.168.4.11

web2 A 192.168.4.12

pc1 A 192.168.4.1

pc2 A 192.168.4.2

www A 192.168.4.21

[root@dns named]# cat tedu.cn.zone2

$TTL 1D

@ IN SOA @ rname.invalid. (

0 ; serial

1D ; refresh

1H ; retry

1W ; expire

3H ) ; minimum

NS dns

dns A 192.168.4.30

squid1 A 192.168.4.21

squid2 A 192.168.4.22

web1 A 192.168.4.11

web2 A 192.168.4.12

pc1 A 192.168.4.1

pc2 A 192.168.4.2

www A 192.168.4.22

[root@dns named]# systemctl start named

[root@dns named]# netstat -antpu | grep named

tcp 0 0 192.168.4.30:53 0.0.0.0:\* LISTEN 1663/named

tcp 0 0 192.168.122.193:53 0.0.0.0:\* LISTEN 1663/named

tcp 0 0 192.168.32.193:53 0.0.0.0:\* LISTEN 1663/named

tcp 0 0 127.0.0.1:53 0.0.0.0:\* LISTEN 1663/named

tcp 0 0 127.0.0.1:953 0.0.0.0:\* LISTEN 1663/named

tcp6 0 0 ::1:953 :::\* LISTEN 1663/named

udp 0 0 192.168.4.30:53 0.0.0.0:\* 1663/named

udp 0 0 192.168.122.193:53 0.0.0.0:\* 1663/named

udp 0 0 192.168.32.193:53 0.0.0.0:\* 1663/named

udp 0 0 127.0.0.1:53 0.0.0.0:\* 1663/named

[root@pc1 ~]# vim /etc/resolv.conf

[root@pc1 ~]# cat /etc/resolv.conf

# Generated by NetworkManager

search tedu.cn

nameserver 192.168.4.30

[root@pc1 ~]# nslookup www.tedu.cn

Server: 192.168.4.30

Address: 192.168.4.30#53

Name: www.tedu.cn

Address: 192.168.4.21

[root@pc1 ~]# curl www.tedu.cn

web1

[root@pc2 ~]# vim /etc/resolv.conf

[root@pc2 ~]# cat /etc/resolv.conf

# Generated by NetworkManager

search tedu.cn

nameserver 192.168.4.30

[root@pc2 ~]# nslookup www.tedu.cn

Server: 192.168.4.30

Address: 192.168.4.30#53

Name: www.tedu.cn

Address: 192.168.4.22

[root@pc2 ~]# curl www.tedu.cn

web1