

# RedHat--DNS配置

2013年12月6日 21:29

## 配置前准备

linux的dns使用的是bind当然dns还有个叫nic还是nis的不过已经废弃了，这个中的b其实就是伯克利大学的意思，这款软件是伯克利大学的一个学生设计的。

我是使用redhat5安装好dns后就再使用apache来验证 [www.muxingxing.com](http://www.muxingxing.com) 这个网站，现实中也是存在这个网站的是我的个人博客，有些技术性的东西分享，也有其他的東西，呵呵，算广告吧^\_^

现在很多都在虚拟化，现在dns也是在虚拟化的，使用的插件就是chroot这个目录的地址，所以需要ln -s这个软连接来连接过去的，但是CentOS的话只要两个包就可以做了，貌似CentOS更简单，如果不会这些东西，推荐区itcast.com去看看，linux学习很有用，也有ccna的视频哦

linux测试比那个win好多了有host和dig，dig很牛逼，以后记着使用普通点就用host

## 现在开始正式配置DNS

### Redhat5

IP	192.168.56.203/24
Dns	192.168.56.203也可以设置成127.0.0.1，看心情吧！
域	muxingxing.com

### Pc1

IP	192.168.56.191/24
Dns	192.168.56.203

## 安装如下包

```
[root@www Server]# rpm -ivh bind-
bind-9.3.3-7.el5.i386.rpm          bind-devel-9.3.3-7.el5.i386.rpm      bind-libs-9.3.3-7.el5.i386.rpm      bind-utils-9.3.3-7.el5.i386.rpm
bind-chroot-9.3.3-7.el5.i386.rpm  bind-libbind-devel-9.3.3-7.el5.i386.rpm  bind-sdb-9.3.3-7.el5.i386.rpm
[root@www Server]# rpm -ivh bind-9.3.3-7.el5.i386.rpm
warning: bind-9.3.3-7.el5.i386.rpm: Header V3 DSA signature: NOKEY, key ID 37017186
Preparing...                        ##### [100%]
 1:bind                            ##### [100%]
[root@www Server]# rpm -ivh bind-chroot-9.3.3-7.el5.i386.rpm
warning: bind-chroot-9.3.3-7.el5.i386.rpm: Header V3 DSA signature: NOKEY, key ID 37017186
Preparing...                        ##### [100%]
 1:bind-chroot                    ##### [100%]
Locating /var/named/chroot/etc/named.conf failed:
[FAILED]
[root@www Server]# rpm -hiv caching-nameserver-9.3.3-7.el5.i386.rpm
warning: caching-nameserver-9.3.3-7.el5.i386.rpm: Header V3 DSA signature: NOKEY, key ID 37017186
Preparing...                        ##### [100%]
 1:caching-nameserver            ##### [100%]
[root@www Server]#
```

这个就是虚拟目录，其实在/etc目录下也应该存在的

```
root@www:/var/named/chroot
[root@www Server]# cd /var/named/chroot/
[root@www chroot]# ll
total 24
drwxr-x--- 2 root named 4096 Dec  2 05:44 dev
drwxr-x--- 2 root named 4096 Dec  2 05:44 etc
drwxr-x--- 5 root named 4096 Dec  2 05:44 var
[root@www chroot]#
```

.bak就是一个备份文件，linux经常用到的，-p保持属性不变-v就是显示操作

```
[root@www etc]# cd -
/var/named/chroot
[root@www chroot]# cd etc
[root@www etc]# ll
total 32
-rw-r--r-- 1 root root 1267 Dec  2 05:17 localtime
-rw-r----- 1 root named 1100 Jan 16  2007 named.caching-nameserver.conf
-rw-r----- 1 root named  955 Jan 16  2007 named.rfc1912.zones
-rw-r--r-- 1 root named 113 Dec  2 05:43 rndc.key
[root@www etc]# cp -pv named.caching-nameserver.conf named.conf
'named.caching-nameserver.conf' -> 'named.conf'
[root@www etc]# cp -pv named.rfc1912.zones named.rfc1912.zones.bak
'named.rfc1912.zones' -> 'named.rfc1912.zones.bak'
[root@www etc]#
```

```
[root@www etc]# nano named.conf
[root@www etc]# cat named.conf
//
// named.caching-nameserver.conf
//
// Provided by Red Hat caching-nameserver package to configure the
// ISC BIND named(8) DNS server as a caching only nameserver
// (as a localhost DNS resolver only).
//
// See /usr/share/doc/bind*/sample/ for example named configuration files.
//
// DO NOT EDIT THIS FILE - use system-config-bind or an editor
// to create named.conf - edits to this file will be lost on
// caching-nameserver package upgrade.
//
options {
    listen-on port 53 { any; };
    listen-on-v6 port 53 { ::1; };
    directory      "/var/named";
    dump-file       "/var/named/data/cache_dump.db";
    statistics-file "/var/named/data/named_stats.txt";
    memstatistics-file "/var/named/data/named_mem_stats.txt";
    //query-source   port 53;
    //query-source-v6 port 53;
    allow-query     { any; };
};

logging {
    channel default_debug {
        file "data/named.run";
        severity dynamic;
    };
};

view localhost_resolver {
    match-clients      { any; };
    match-destinations { any; };
    recursion yes;
    include "/etc/named.rfc1912.zones";
};
[root@www etc]#
```

这里只要改需要改的地方其他不要动



```
root@www:/var/named/chroot/var/named
[root@www named]# ll
total 72
drwxrwx--- 2 named named 4096 Aug 25 2004 data
-rw-r----- 1 root named 198 Jan 16 2007 localdomain.zone
-rw-r----- 1 root named 195 Jan 16 2007 localhost.zone
-rw-r----- 1 root named 427 Jan 16 2007 named.broadcast
-rw-r----- 1 root named 2518 Jan 16 2007 named.ca
-rw-r----- 1 root named 424 Jan 16 2007 named.ip6.local
-rw-r----- 1 root named 426 Jan 16 2007 named.local
-rw-r----- 1 root named 427 Jan 16 2007 named.zero
drwxrwx--- 2 named named 4096 Jul 27 2004 slaves
[root@www named]# cp -pv localhost.zone muxingxing.com.zone
'localhost.zone' -> 'muxingxing.com.zone'
[root@www named]# cp -pv named.local muxingxing.com.local
'named.local' -> 'muxingxing.com.local'
[root@www named]#
```

正向解析

【提示：按照规定，这个mx记录要在其他记录前边，呵呵，如果配错了，不要怨我没说，这个不成文的规定，也有时候就是配对了，这个顺序不对也会错误！】

```
root@www:/var/named/chroot/var/named
GNU nano 1.3.12 File: muxingxing.com.zone
$TTL      86400
@          IN SOA  @      root (
                        42      ; serial (d. adams)
                        3H      ; refresh
                        15M     ; retry
                        1W      ; expiry
                        1D )    ; minimum

          IN NS   dns.muxingxing.com.
          IN A    127.0.0.1
          IN AAAA ::1
          IN MX   10 mail.muxingxing.com.
www        IN A    192.168.56.203
mail       IN A    192.168.56.203
ftp        IN A    192.168.56.99
```

反向解析

```
root@www:/var/named/chroot/var/named
GNU nano 1.3.12 File: muxing

$TTL      86400
@         IN      SOA      localhost. root.localhost. (
                                1997022700 ; Serial
                                28800      ; Refresh
                                14400      ; Retry
                                3600000    ; Expire
                                86400 )    ; Minimum

        IN      NS       dns.muxingxing.com.
1       IN      PTR      localhost.
100     IN      PTR      www.muxingxing.com.
100     IN      PTR      mail.muxingxing.com.
100     IN      PTR      ftp.muxingxing.com.
```

```
root@www:/var/named/chroot/var/named
[root@www named]# ln -s /var/named/chroot/etc/named.conf /etc/
[root@www named]# ll /etc/named*
lrwxrwxrwx 1 root named 52 Dec  2 05:44 /etc/named.caching-nameserver.conf -> /var/named/chroot/etc/named.caching-nameserver.conf
lrwxrwxrwx 1 root root  32 Dec  2 06:08 /etc/named.conf -> /var/named/chroot/etc/named.conf
lrwxrwxrwx 1 root named 42 Dec  2 05:44 /etc/named.rfc1912.zones -> /var/named/chroot/etc/named.rfc1912.zones
[root@www named]#
```

测试结果

```
[root@www named]# dig -t MX muxingxing.com

;<<>> DiG 9.3.3rc2 <<>> -t MX muxingxing.com
;; global options: printcmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 31180
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 1

;; QUESTION SECTION:
;muxingxing.com.                IN      MX

;; ANSWER SECTION:
muxingxing.com.                86400   IN      MX      10 mail.muxingxing.com.

;; AUTHORITY SECTION:
muxingxing.com.                86400   IN      NS      dns.muxingxing.com.

;; ADDITIONAL SECTION:
mail.muxingxing.com.           86400   IN      A       192.168.56.203

;; Query time: 0 msec
;; SERVER: 192.168.56.203#53(192.168.56.203)
;; WHEN: Mon Dec  2 06:18:54 2013
;; MSG SIZE rcvd: 87

[root@www named]#
```

```
[root@www Server]# dig www.muxingxing.com

; <<>> DiG 9.3.3rc2 <<>> www.muxingxing.com
;; global options: printcmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 38429
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 0

;; QUESTION SECTION:
;www.muxingxing.com.          IN      A

;; ANSWER SECTION:
www.muxingxing.com.          86400   IN      A      192.168.56.203

;; AUTHORITY SECTION:
muxingxing.com.              86400   IN      NS      dns.muxingxing.com.

;; Query time: 1 msec
;; SERVER: 192.168.56.203#53(192.168.56.203)
;; WHEN: Mon Dec 2 06:23:27 2013
;; MSG SIZE rcvd: 70

[root@www Server]#
```

```
[root@www Server]# dig ftp.muxingxing.com

; <<>> DiG 9.3.3rc2 <<>> ftp.muxingxing.com
;; global options: printcmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 38078
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 0

;; QUESTION SECTION:
;ftp.muxingxing.com.          IN      A

;; ANSWER SECTION:
ftp.muxingxing.com.          86400   IN      A      192.168.56.99

;; AUTHORITY SECTION:
muxingxing.com.              86400   IN      NS      dns.muxingxing.com.

;; Query time: 1 msec
;; SERVER: 192.168.56.203#53(192.168.56.203)
;; WHEN: Mon Dec 2 06:24:00 2013
;; MSG SIZE rcvd: 70

[root@www Server]#
```

```
root@www:/mnt/cdrom/Server
[root@www Server]# host www.muxingxing.com
www.muxingxing.com has address 192.168.56.203
[root@www Server]# host mail.muxingxing.com
mail.muxingxing.com has address 192.168.56.203
[root@www Server]# host ftp.muxingxing.com
ftp.muxingxing.com has address 192.168.56.99
```

客户端测试

```

C:\Documents and Settings\Administrator>nslookup muxingxing.com
*** Can't find server name for address 192.168.56.203: Non-existent domain
*** Default servers are not available
Server: UnKnown
Address: 192.168.56.203

Name: muxingxing.com
Address: 127.0.0.1

C:\Documents and Settings\Administrator>nslookup www.muxingxing.com
*** Can't find server name for address 192.168.56.203: Non-existent domain
*** Default servers are not available
Server: UnKnown
Address: 192.168.56.203

Name: www.muxingxing.com
Address: 192.168.56.203

C:\Documents and Settings\Administrator>

```

```

[root@www Server]# service httpd restart
Stopping httpd: [FAILED]
Starting httpd: httpd: Could not reliably determine the server's fully qualified domain name, using www.muxingxing.com for ServerName
[ OK ]

[root@www Server]# cat <<!>> /var/www/html/index.html
> 这个是我的测试3w
> 欢迎访问我的网站: www.muxingxing.com
> !
[root@www Server]# cat /var/www/html/index.html
这个是我的测试3w
欢迎访问我的网站: www.muxingxing.com
[root@www Server]#

```



