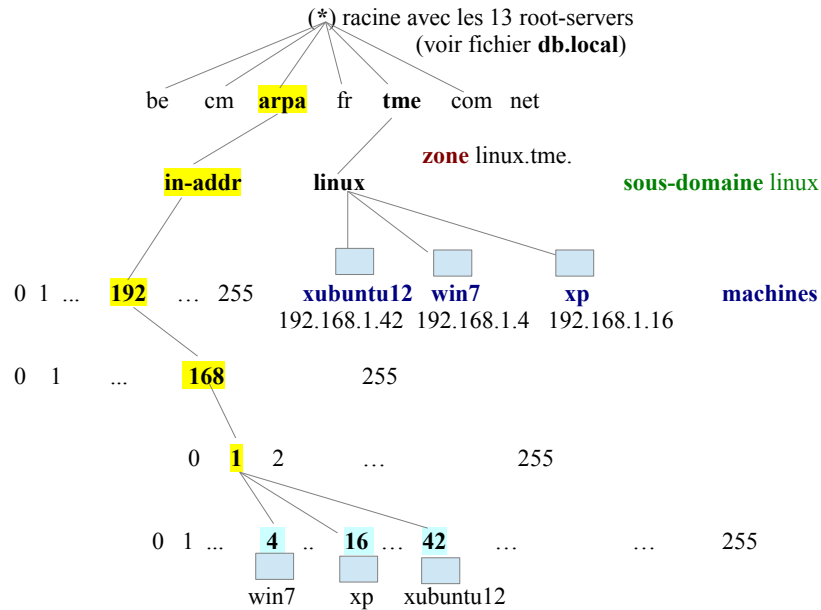


Travail Dirigé serveur DNS

Objet : mise en œuvre d'un serveur DNS sous linux xubuntu 12

Il s'agit de mettre en place l'architecture Internet suivante :



Résolution directe : nom hôte => adresse IP

Fichier des résolveurs `/etc/resolv.conf`

```
On y déclare les domaines et les serveurs DNS
domain linux.tme
search linux.tme
nameserver 192.168.1.42
```

On peut déclarer au plus trois serveurs de noms

Fichier `/etc/bind/db.local`

```
$TTL 604800
@ IN SOA localhost. root.localhost. (
2014032103 ; Serial au format AAAAMMJJxx
```

```
604800 ; Refresh
86400 ; Retry
2419200 ; Expire
604800 ) ; Negative Cache TTL
@ IN NS localhost.
@ IN A 127.0.0.1
```

Fichier des paramètres de zone `/etc/bind/named.conf.default-zones`

```
zone "." {
    type hint;
    file "/etc/bind/db.root";
};

zone "localhost" {
    type master;
    file "/etc/bind/db.local";
};
```

Fichier `/etc/bind/named.conf`

```
//
include "/etc/bind/named.conf.options";
include "/etc/bind/named.conf.local";
include "/etc/bind/named.conf.default-zones";
```

Fichier de déclaration des zones `/etc/bind/named.conf.local`

```
-Zone directe :
zone "linux.tme" {
    type master;
    file "/etc/bind/linux.tme.host";
};

-Zone inverse :
zone "1.168.192.in-addr.arpa" {
    type master;
    file "/etc/bind/linux.tme.rev";
};
```

Fichier de zone directe /etc/bind/linux.tme.hosts

```
$TTL      86400
@         IN      SOA      xubuntu12 linux.tme. (
                2014032105      ; Serial
                604800      ; Refresh
                86400      ; Retry
                2419200      ; Expire
                86400 )      ; Negative Cache TTL
; ---- serveur
@         IN      NS      xubuntu12 linux.tme.
xubuntu12 linux.tme. IN      A      192.168.1.42
; ----- clients -----
xubuntu12 linux.tme. IN      A      192.168.1.42
win7 linux.tme.      IN      A      192.168.1.4
xp linux.tme.       IN      A      192.168.1.16
```

Résolution inversée(REVerse) : IP => nom

Fichier associe : /etc/bind/linux.tme.rev

```
$TTL      604800
@         IN      SOA      xubuntu12 linux.tme. (
                2014032105      ; Serial
                604800      ; Refresh
                86400      ; Retry
                2419200      ; Expire
                604800 )      ; Negative Cache TTL
; --- serveur
@         IN      NS      xubuntu12 linux.tme.
42        IN      PTR     xubuntu12 linux.tme.
; ----- clients -----
4         IN      PTR     win7 linux.tme.
16        IN      PTR     xp linux.tme.
```

Vérification de la configuration et tests de résolution

```
root@xubuntu12:~# named-checkconf
root@xubuntu12:~# named-checkzone linux.tme /etc/bind/linux.tme.host
zone linux.tme/IN: loaded serial 2014032105
OK
root@xubuntu12:~# service bind9 restart
* Stopping domain name service... bind9  waiting for pid 4300 to die
* Starting domain name service... bind9
root@xubuntu12:~# nslookup
> server
Default server: 192.168.1.42
Address: 192.168.1.42#53

> xubuntu12
Server:          192.168.1.42
Address: 192.168.1.42#53

Name:   xubuntu12 linux.tme
Address: 192.168.1.42

> win7
Server:          192.168.1.42
Address: 192.168.1.42#53

Name:   win7 linux.tme
Address: 192.168.1.4

> xp
Server:          192.168.1.42
Address: 192.168.1.42#53

Name:   xp linux.tme
Address: 192.168.1.16

> 192.168.1.4
Server:          192.168.1.42
Address: 192.168.1.42#53

4.1.168.192.in-addr.arpa  name = win7 linux.tme.
```

[OK]
[OK]

```
> 192.168.1.16
Server:      192.168.1.42
Address: 192.168.1.42#53

16.1.168.192.in-addr.arpa  name = xp.linux.tme.

> 192.168.1.42
Server:      192.168.1.42
Address: 192.168.1.42#53

42.1.168.192.in-addr.arpa  name = xubuntu12.linux.tme.

> localhost
Server:      192.168.1.42
Address: 192.168.1.42#53

Name:  localhost
Address: 127.0.0.1
>exit

root@xubuntu12:~# host xubuntu12
xubuntu12.linux.tme has address 192.168.1.42

root@xubuntu12:~# host win7
win7.linux.tme has address 192.168.1.4

root@xubuntu12:~# host xp
xp.linux.tme has address 192.168.1.16

root@xubuntu12:~# host 192.168.1.16
16.1.168.192.in-addr.arpa domain name pointer xp.linux.tme.

root@xubuntu12:~# host 192.168.1.42
42.1.168.192.in-addr.arpa domain name pointer xubuntu12.linux.tme.

root@xubuntu12:~# host 192.168.1.4
4.1.168.192.in-addr.arpa domain name pointer win7.linux.tme.

root@xubuntu12:~#
```