

Création d'un serveur DNS sur débien12



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Sommaire

1. Préparation du serveur	3
2. Configuration de bind9	4
3. Test du serveur	6

dig www.google.fr :

```
Debian GNU/Linux 12 srv-bousquet.sio.local tty1
srv-bousquet login: root
Password:
Linux srv-bousquet.sio.local 6.1.0-25-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.106-3 (2024-08-26) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Mon Sep  9 11:28:58 CEST 2024 on tty1
root@srv-bousquet:~# nslookup www.google.fr
;; Got SERVFAIL reply from 172.31.6.192
Server:      172.31.6.192
Address:     172.31.6.192#53

** server can't find www.google.fr: SERVFAIL

root@srv-bousquet:~# dig www.google.fr

; <>> DIG 9.18.28-1"deb12u2-Debian <>> www.google.fr
;; global options: +cmd
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 26326
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:: udp: 1232
; COOKIE: b7a627bdb4f16c990100000066e001f586bc87b1ff2c09f4 (good)
;; QUESTION SECTION:
;www.google.fr.                IN      A
;; ANSWER SECTION:
www.google.fr.                300     IN      A      216.58.214.67

;; Query time: 204 msec
;; SERVER: 172.31.6.192#53(172.31.6.192) (UDP)
;; WHEN: Tue Sep 10 10:23:17 CEST 2024
;; MSG SIZE rcvd: 86

root@srv-bousquet:~# _
```

2. Configuration de bind9

Named.conf.local :

```
GNU nano 7.2
//
// Do any local configuration here
//

// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";

zone "geot.fr" {
    type master;
    file "/etc/bind/geot.fr";
};

zone "7.31.172.in-addr.arpa" {
    type master;
    file "/etc/bind/db7";
};

zone "duck.geot.fr" {
    type master;
    file "/etc/bind/duck.geot.fr";
};
```

} Zone de base

} Zone inverse

} Sous-zone

Zone de Base, geot.fr :

```
GNU nano 7.2
geot.fr. IN SOA srvidns.geot.fr. root.geot.fr. (
    1      ; Serial
    604800 ; Refresh
    86400  ; Retry
    2419200 ; Expire
    604800 ) ; Negative Cache TTL

geot.fr.                IN NS      srvidns.geot.fr.
srvidns.geot.fr.        IN A      172.31.7.244
www.geot.fr.            IN A      172.31.7.100
ftp.geot.fr.            IN A      172.31.7.101
cdf.geot.fr.            IN A      172.31.7.102
```

Pointage

Autres services

Zone inverse, db7 :

```
GNU nano 7.2
7.31.172.in-addr.arpa. IN SOA srvidns.geot.fr. root.geot.fr. (
    1      ; Serial
    604800 ; Refresh
    86400  ; Retry
    2419200 ; Expire
    604800 ) ; Negative Cache TTL

7.31.172.in-addr.arpa. IN NS      srvidns.geot.fr.
244                    IN PTR     srvidns.geot.fr.
100                    IN PTR     www.geot.fr.
101                    IN PTR     ftp.geot.fr.
102                    IN PTR     cdf.geot.fr.
duck.geot.fr.          IN NS      srvidns.geot.fr.
90                     IN PTR     www.duck.geot.fr.
91                     IN PTR     ftp.duck.geot.fr.
92                     IN PTR     cdf.duck.geot.fr.
```

Zone inverse

Sous-zone de la zone inverse

Sous-zone, duck.geot.fr :

```
GNU nano 7.2
duck.geot.fr. IN SOA srvidns.geot.fr. root.geot.fr. (
    1      ; Serial
    604800 ; Refresh
    68400  ; Retry
    2419200 ; Expire
    604800 ) ; Negative Cache TTL

duck.geot.fr. IN NS      srvidns.geot.fr.
www.duck.geot.fr. IN A    172.31.7.90
ftp.duck.geot.fr. IN A    172.31.7.91
cdf.duck.geot.fr. IN A    172.31.7.92
```

Autres services

3. Test du serveur

Nslookup :

```
root@srvdns:/etc/bind# nslookup 172.31.7.100
;; Got SERVFAIL reply from 172.31.7.244
** server can't find 100.7.31.172.in-addr.arpa: SERVFAIL

root@srvdns:/etc/bind# nslookup ftp.geot.fr
Server:      172.31.7.244
Address:     172.31.7.244#53

Name:   ftp.geot.fr
Address: 172.31.7.101

root@srvdns:/etc/bind# nslookup cdf.geot.fr
Server:      172.31.7.244
Address:     172.31.7.244#53

Name:   cdf.geot.fr
Address: 172.31.7.102

root@srvdns:/etc/bind# nslookup www.geot.fr
Server:      172.31.7.244
Address:     172.31.7.244#53

Name:   www.geot.fr
Address: 172.31.7.100

root@srvdns:/etc/bind# nslookup wwwduck..geot.fr
nslookup: 'wwwduck..geot.fr' is not a legal name (empty label)
root@srvdns:/etc/bind# nslookup www.duck.geot.fr
Server:      172.31.7.244
Address:     172.31.7.244#53

Name:   www.duck.geot.fr
Address: 172.31.7.100

root@srvdns:/etc/bind# nslookup ftp.duck.geot.fr
Server:      172.31.7.244
Address:     172.31.7.244#53

Name:   ftp.duck.geot.fr
Address: 172.31.7.101

root@srvdns:/etc/bind# nslookup cdf.duck.geot.fr
Server:      172.31.7.244
Address:     172.31.7.244#53

Name:   cdf.duck.geot.fr
Address: 172.31.7.102

root@srvdns:/etc/bind#
```

```
root@srvdns:/etc/bind# nslookup 172.31.7.100
100.7.31.172.in-addr.arpa      name = www.geot.fr.

root@srvdns:/etc/bind# nslookup 172.31.7.101
101.7.31.172.in-addr.arpa      name = ftp.geot.fr.

root@srvdns:/etc/bind# nslookup 172.31.7.102
102.7.31.172.in-addr.arpa      name = cdf.geot.fr.
```

Nslookup sur le client

```
root@srv-bousquet:~# nslookup www.geot.fr
Server:      172.31.7.244
Address:     172.31.7.244#53

Name:   www.geot.fr
Address: 172.31.7.100

root@srv-bousquet:~# nslookup 172.31.7.244
244.7.31.172.in-addr.arpa      name = srvdns.geot.fr.

root@srv-bousquet:~#
```

Named-check zone :

```
root@srvdns:/etc/bind# named-checkzone 7.31.172.in-addr.arpa db7
db7:1: no TTL specified; using SOA MINTTL instead
db7:16: ignoring out-of-zone data (duck.geot.fr)
zone 7.31.172.in-addr.arpa/IN: loaded serial 1
OK
root@srvdns:/etc/bind# named-checkzone geot.fr geot.fr
geot.fr:1: no TTL specified; using SOA MINTTL instead
zone geot.fr/IN: loaded serial 1
OK
root@srvdns:/etc/bind# named-checkzone duck.geot.fr duck.geot.fr
duck.geot.fr:1: no TTL specified; using SOA MINTTL instead
zone duck.geot.fr/IN: loaded serial 1
```

Toujours penser à relancer le service bind9 après chaque modification de fichier de configuration :

```
root@srvdns:/etc/bind# systemctl restart bind9
```