

Documentation technique Serveur multisites

A) Serveur Web

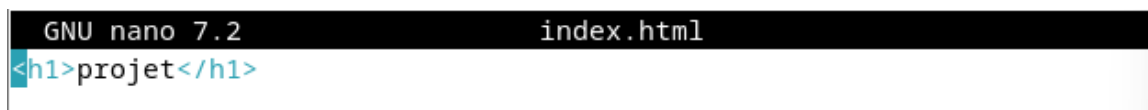
1) **Installation Apache2**

`sudo apt install apache2`

2) **Arborescence des sites**

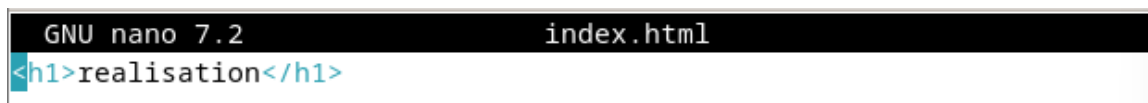
projet.local :

`sudo nano /var/www/html/projet/index.html`

A screenshot of the GNU nano 7.2 text editor. The title bar at the top shows 'GNU nano 7.2' on the left and 'index.html' on the right. The main editing area contains a single line of HTML code: `<h1>projet</h1>`. The cursor is positioned at the end of the line.

realisation.local :

`sudo nano /var/www/html/realisation/index.html`

A screenshot of the GNU nano 7.2 text editor. The title bar at the top shows 'GNU nano 7.2' on the left and 'index.html' on the right. The main editing area contains a single line of HTML code: `<h1>realisation</h1>`. The cursor is positioned at the end of the line.

3) **Création des VirtualHosts**

projet.conf

`sudo nano /etc/apache2/sites-available/projet.conf`

```

GNU nano 7.2      projet.conf *
<VirtualHost *:80>
    # The ServerName directive sets the request scheme, hostname>
    # the server uses to identify itself. This is used when crea>
    # redirection URLs. In the context of virtual hosts, the Ser>
    # specifies what hostname must appear in the request's Host:>
    # match this virtual host. For the default virtual host (thi>
    # value is not decisive as it is used as a last resort host >
    # However, you must set it for any further virtual host expl>
    #ServerName www.example.com

    ServerAdmin webmaster@localhost
    ServerName www.projet.local
    DocumentRoot /var/www/html/projet
    <Directory /var/www/html/projet>
        AuthType Basic
        AuthName "BasicAuthentication"
        AuthuserFile /etc/apache2/.htpasswd_projet
        require valid-user
    </Directory>

```

realisation.conf

sudo nano /etc/apache2/sites-available/realisation.conf

```

GNU nano 7.2      realisation.conf *
<VirtualHost *:80>
    # The ServerName directive sets the request scheme, hostname>
    # the server uses to identify itself. This is used when crea>
    # redirection URLs. In the context of virtual hosts, the Ser>
    # specifies what hostname must appear in the request's Host:>
    # match this virtual host. For the default virtual host (thi>
    # value is not decisive as it is used as a last resort host >
    # However, you must set it for any further virtual host expl>
    #ServerName www.example.com

    ServerAdmin webmaster@localhost
    ServerName www.realisation.local
    DocumentRoot /var/www/html/realisation
    <Directory /var/www/html/realisation>
        AuthType Basic
        AuthName "BasicAuthentication"
        AuthuserFile /etc/apache2/.htpasswd_realisation
        require valid-user
    </Directory>

```

Dans ces fichiers, il faut leur attribuer leurs noms de domaine (projet.local et realisation.local). Ensuite, leur donner le chemin du fichier HTML. Enfin, pour l'authentification par mot de passe aux serveur web, créer les différents paramètres nécessaires

4) Authentification par mot de passe

Commande pour créer un utilisateur et son mot de passe pour le site projet :

```
root@Debian12:/etc/apache2# htpasswd -c /etc/apache2/.htpasswd_projet adumel
New password:
Re-type new password:
Adding password for user adumel
```

```
root@Debian12:/etc/apache2# sudo htpasswd /etc/apache2/.htpasswd_projet daustin
New password:
Re-type new password:
Adding password for user daustin
```

Commande pour créer un utilisateur et son mot de passe pour le site realisation :

```
root@Debian12:/etc/apache2# htpasswd -c /etc/apache2/.htpasswd_realisation adumel
New password:
Re-type new password:
Adding password for user adumel
```

```
root@Debian12:/etc/apache2# sudo htpasswd /etc/apache2/.htpasswd_realisation daustin
New password:
Re-type new password:
Adding password for user daustin
```

```
root@Debian12:/etc/apache2# sudo htpasswd /etc/apache2/.htpasswd_realisation pfilaux
New password:
Re-type new password:
Adding password for user pfilaux
```

```
root@Debian12:/etc/apache2# sudo htpasswd /etc/apache2/.htpasswd_realisation cklein
New password:
Re-type new password:
Adding password for user cklein
```

Vérification que les mot de passes ne soit pas en clair:

```
user@Debian12: ~  
GNU nano 7.2 /etc/apache2/.htpasswd_projet  
adumel:$apr1$S2p6H8y2$Tl8QhEanXG68/cPNr.tde0  
daustin:$apr1$ynXsFMt.$0Gzj3Xh1SZCluwONG3ctR.
```

```
user@Debian12: ~  
GNU nano 7.2 /etc/apache2/.htpasswd_realisation  
adumel:$apr1$5HP9zd6q$9nYgLBYYfdrd.0LmsxNgr1  
daustin:$apr1$ZZ0F2ZC0$5SRClW6tM.02nKWP6WU8B.  
pfilaux:$apr1$r2zzJx.zd$f1Bqyrq.Fp7rPD1ou10iy0  
cklein:$apr1$fPgEC7YM$i0xWfYCRYvckzaLEehvQF.
```

5) Activation des sites

```
sudo a2ensite projet.conf  
sudo a2ensite realisation.conf
```

6) Redémarrage Apache

```
sudo systemctl restart apache2
```

7) Modification du fichier Hosts sur le client

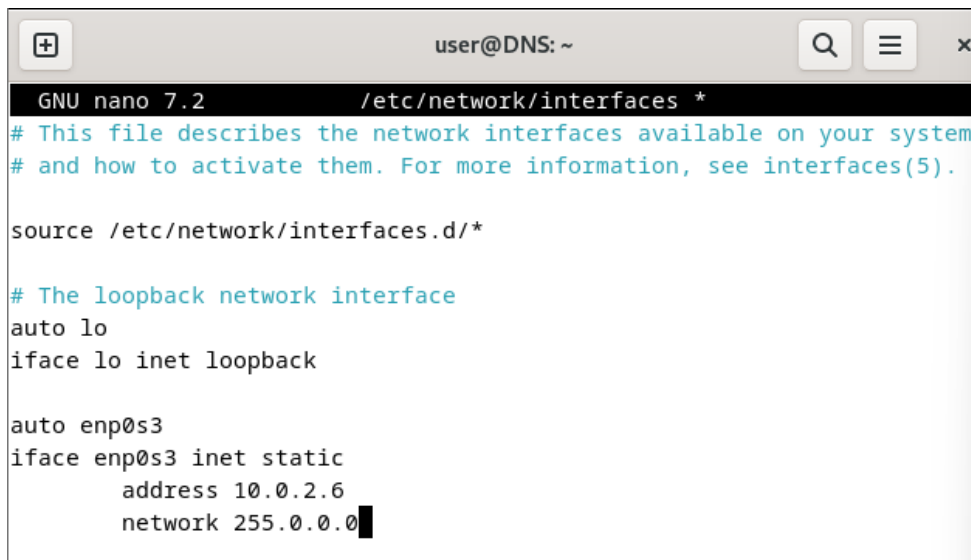
```
GNU nano 7.2 /etc/hosts *  
127.0.0.1 localhost  
127.0.1.1 Debian12  
127.0.0.1 www.projet.local  
127.0.0.1 www.realisation.local  
  
# The following lines are desirable for IPv6 capable hosts  
::1 localhost ip6-localhost ip6-loopback  
ff02::1 ip6-allnodes  
ff02::2 ip6-allrouters
```

B) Serveur DNS

1) Installation de Bind9

```
sudo apt install bind9 bind9utils dnsutils
```

2) Configuration IP statique



```
GNU nano 7.2 /etc/network/interfaces *
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

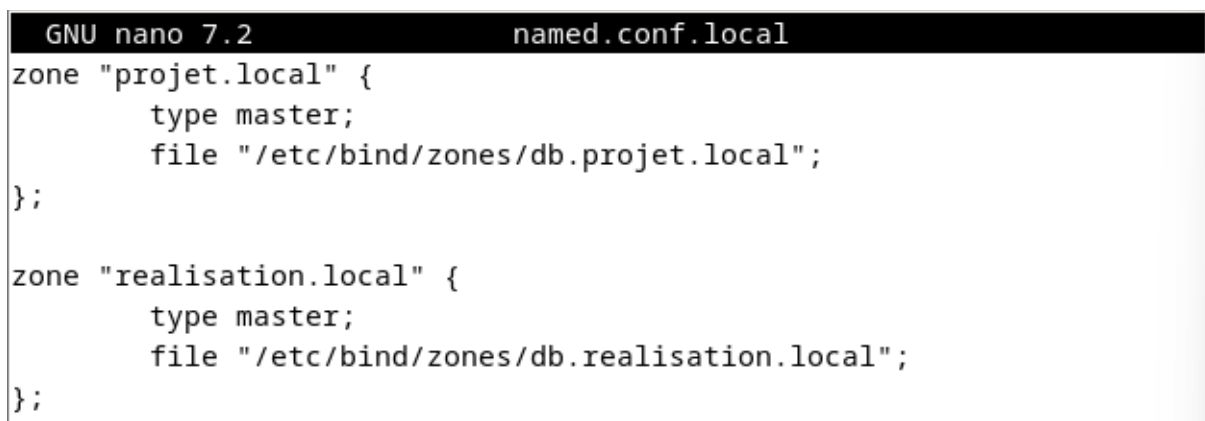
# The loopback network interface
auto lo
iface lo inet loopback

auto enp0s3
iface enp0s3 inet static
    address 10.0.2.6
    network 255.0.0.0
```

Déclarer une adresse statique pour le serveur DNS

3) Déclaration des zones

```
sudo nano /etc/bind/named.conf.local
```



```
GNU nano 7.2 named.conf.local
zone "projet.local" {
    type master;
    file "/etc/bind/zones/db.projet.local";
};

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

4) Zone directe projet.local

```
sudo nano /etc/bind/zones/db.projet.local
```

```
user@DNS: ~
GNU nano 7.2 db.projet.local *
;
; BIND data file for local loopback interface
;
$TTL      604800
@          IN      SOA      DNS.projet.local. root.projet.local. (
                        2      ; Serial
                        604800 ; Refresh
                        86400  ; Retry
                        2419200 ; Expire
                        604800 ) ; Negative Cache TTL
;
@          IN      NS       DNS.projet.local
Debian-12  IN      A        10.0.2.15
Client     IN      A        10.0.2.5
DNS        IN      A        10.0.2.6
www        IN      A        10.0.2.15
```

5) Zone directe realisation.local

sudo nano /etc/bind/zones/db.realisation.local

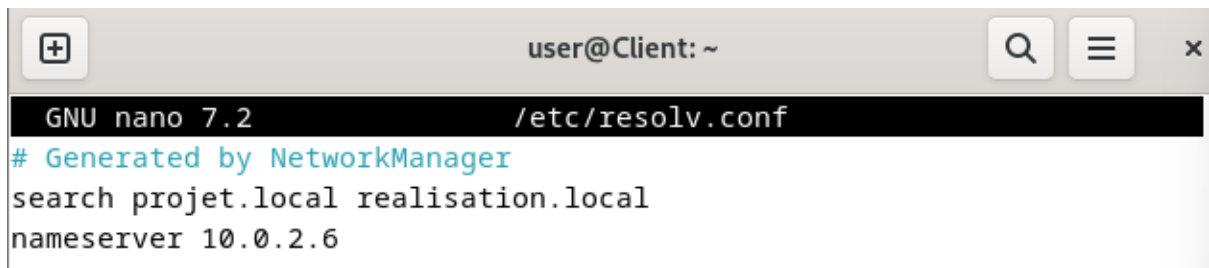
```
user@DNS: ~
GNU nano 7.2 db.realisation.local *
;
; BIND data file for local loopback interface
;
$TTL      604800
@          IN      SOA      DNS.realisation.local. root.realisation.local. (
                        2      ; Serial
                        604800 ; Refresh
                        86400  ; Retry
                        2419200 ; Expire
                        604800 ) ; Negative Cache TTL
;
@          IN      NS       DNS.realisation.local
Debian-12  IN      A        10.0.2.15
Client     IN      A        10.0.2.5
DNS        IN      A        10.0.2.6
www        IN      A        10.0.2.15
```

6) Redémarrage

sudo systemctl restart bind9

sudo systemctl status bind9

7) Resolv.conf



The image shows a terminal window with a light gray title bar. On the left is a square icon with a plus sign. In the center is the text "user@Client: ~". On the right are three icons: a magnifying glass, a hamburger menu, and a close button (an 'x'). Below the title bar is a black bar with white text: "GNU nano 7.2" on the left and "/etc/resolv.conf" on the right. The main area of the terminal is white and contains the following text: a blue comment line "# Generated by NetworkManager", followed by "search projet.local realisation.local" and "nameserver 10.0.2.6".

```
GNU nano 7.2 /etc/resolv.conf
# Generated by NetworkManager
search projet.local realisation.local
nameserver 10.0.2.6
```