

1.-Actualizamos el sistema.

```
ubuntu@ubuntu2204: ~$ sudo apt-get update
Get:1 https://download.docker.com/linux/ubuntu focal InRelease [57.7 kB]
Get:2 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages [54.1 kB]
Hit:3 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Get:4 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [2,276 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [382 kB]
Get:9 http://in.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [2,877 kB]
Get:10 http://in.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [501 kB]
Get:11 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1,182 kB]
Get:12 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [289 kB]
Get:13 http://in.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [44.5 kB]
Get:14 http://in.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [11.5 kB]
Get:15 http://in.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [67.7 kB]
Get:16 http://in.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [28.9 kB]
Get:17 http://in.archive.ubuntu.com/ubuntu jammy-security/main amd64 Packages [2,041 kB]
Get:18 http://in.archive.ubuntu.com/ubuntu jammy-security/main Translation-en [321 kB]
Get:19 http://in.archive.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [2,772 kB]
Get:20 http://in.archive.ubuntu.com/ubuntu jammy-security/restricted Translation-en [484 kB]
Get:21 http://in.archive.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [959 kB]
Get:22 http://in.archive.ubuntu.com/ubuntu jammy-security/universe Translation-en [204 kB]
Get:23 http://in.archive.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [37.6 kB]
Fetched 15.0 MB in 6s (2,577 kB/s)
Reading package lists... Done
W: https://download.docker.com/linux/ubuntu/dists/focal/InRelease: Key is stored in legacy trusted.gpg
keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
ubuntu@ubuntu2204: ~$
```

2.-Instalamos la herramienta.

```
ubuntu@ubuntu2204: ~$ sudo apt install bind9 bind9utils
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libflashrom1 libftd1-2
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  bind9-dnsutils bind9-host bind9-libs bind9-utils dns-root-data
Suggested packages:
  bind-doc resolvconf
The following NEW packages will be installed:
  bind9 bind9-utils bind9utils dns-root-data
The following packages will be upgraded:
```

3.-Actualizamos el fichero named.conf.options

```
ubuntu@ubuntuserver2204: ~  
GNU nano 6.2 /etc/bind/named.conf.options *  
options {  
    directory "/var/cache/bind";  
  
    listen-on port 53 { 192.168.x.x; }; // Reemplaza 192.168.x.x por la IP interna del servidor.  
    recursion no; // Deshabilita la resolución recursiva.  
    allow-transfer { none; }; // Bloquea transferencias de zona.  
    version "No disponible"; // Oculta la versión de Bind.  
  
    // If there is a firewall between you and nameservers you want  
    // to talk to, you may need to fix the firewall to allow multiple  
    // ports to talk. See http://www.kb.cert.org/vuls/id/800113  
  
    // If your ISP provided one or more IP addresses for stable  
    // nameservers, you probably want to use them as forwarders.  
    // Uncomment the following block, and insert the addresses replacing  
    // the all-0's placeholder.  
  
    // forwarders {  
    //     0.0.0.0;  
    // };  
  
    //=====   
    // If BIND logs error messages about the root key being expired,  
    // you will need to update your keys. See https://www.isc.org/bind-keys  
    //=====   
    dnssec-validation auto;  
  
    listen-on-v6 { any; };  
};
```

4.-Actualizamos el archivo /bind9

```
ubuntu@ubuntuserver2204: ~  
GNU nano 6.2 /etc/default/bind9 *  
OPTIONS="-4 -u bind"
```

5.-Configuramos el archivo /named.conf.local

```
ubuntu@ubuntuserver2204: ~  
GNU nano 6.2 /etc/bind/named.conf.local *  
//  
// 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 "antonBlagodarnyyTareal.com" {  
    type master;  
    file "/etc/bind/zones/db.antonBlagodarnyyTareal.com";  
};
```

6.-Creamos el archivo de la zona directa con la configuracion indicada.

```
ubuntu@ubuntuserver2204: ~  
GNU nano 6.2 /etc/bind/zones/db.nombreApellidoTareal.com *  
$TTL 604800 ; Tiempo de vida en segundos de las respuestas DNS  
$ORIGIN antonBlagodarnyyTareal.com. ; Dominio base para los registros de esta zona  
  
@ IN SOA ns1.antonBlagodarnyyTareal.com. admin.antonBlagodarnyyTareal.com. (  
    1601202501 ; Serial: 16/01/2025, primera modificación  
    604800 ; Refresh: 1 semana  
    86400 ; Retry: 1 día  
    2419200 ; Expire: 4 semanas  
    604800 ) ; Negative Cache TTL: 1 semana  
  
; Name servers - registros NS  
@ IN NS ns1 ; Indica que ns1 es el servidor autoritativo de la zona  
  
; Registros tipo A - direcciones IP asociadas a nombres  
ns1 IN A 192.168.56.101 ; Reemplaza con la IP de tu servidor DNS  
www IN A 192.168.56.101 ; Reemplaza con la IP de tu servidor Apache
```

7.-Aqui se ve como se ha creado la carpeta y pegado en el sitio indicado.

```
ubuntu@ubuntuserver2204: ~$ sudo mkdir /etc/bind/zones
ubuntu@ubuntuserver2204:~$ sudo cp /etc/bind/db.local /etc/bind/zones/db.antonBlagodarnyyTarea1.com
ubuntu@ubuntuserver2204:~$ sudo nano /etc/bind/zones/db.nombreApellidoTarea1.com
ubuntu@ubuntuserver2204:~$ |
```

8.-Comprobamos los errores sintacticos.

```
ubuntu@ubuntuserver2204: ~$ sudo named-checkconf
ubuntu@ubuntuserver2204:~$ |

ubuntu@ubuntuserver2204:~$ sudo named-checkzone antonBlagodarnyyTarea1.com /etc/bind/zones/db.nombreApellidoTarea1.com
zone antonBlagodarnyyTarea1.com/IN: loaded serial 1601202501
OK
ubuntu@ubuntuserver2204:~$ |
```

9.-Configuramos la pagina web para que escuche por el puerto indicado.

```
ubuntu@ubuntu-server2204: / X + v
GNU nano 6.2 tarea2_webpublica.conf *
<VirtualHost *:80>
    # The ServerName directive sets the request scheme, hostname and port that
    # the server uses to identify itself. This is used when creating
    # redirection URLs. In the context of virtual hosts, the ServerName
    # specifies what hostname must appear in the request's Host: header to
    # match this virtual host. For the default virtual host (this file) this
    # value is not decisive as it is used as a last resort host regardless.
    # However, you must set it for any further virtual host explicitly.
    ServerName www.antonBlagodarnyyTarea1.com
    ServerAlias webpublica.es

    ServerAdmin webmaster@localhost
    DocumentRoot /var/www/webPublica

    # Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
    # error, crit, alert, emerg.
    # It is also possible to configure the loglevel for particular
    # modules, e.g.
    #LogLevel info ssl:warn

    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined

    # For most configuration files from conf-available/, which are
    # enabled or disabled at a global level, it is possible to
    # include a line for only one particular virtual host. For example the
    # following line enables the CGI configuration for this host only
    # after it has been globally disabled with "a2disconf".
    #Include conf-available/serve-cgi-bin.conf
</VirtualHost>

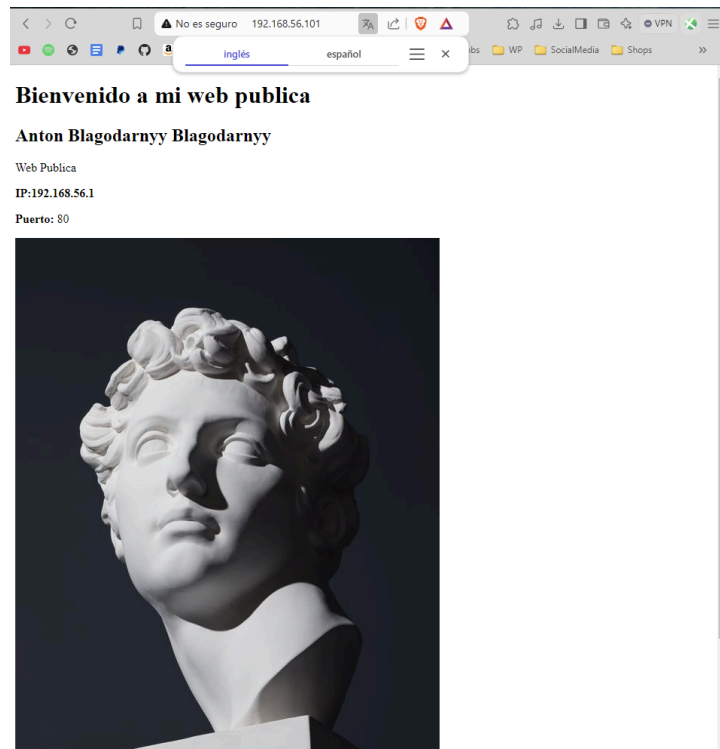
# vim: syntax=apache ts=4 sw=4 sts=4 sr noet
```

10.-Reiniciamos el servidor

```
ubuntu@ubuntuserver2204:/etc/apache2/sites-available$ sudo a2ensite tarea2_webpublica.conf
Enabling site tarea2_webpublica.
To activate the new configuration, you need to run:
  systemctl reload apache2
ubuntu@ubuntuserver2204:/etc/apache2/sites-available$ systemctl reload apache2
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ====
Authentication is required to reload 'apache2.service'.
Authenticating as: Ubuntu (ubuntu)
Password:
==== AUTHENTICATION COMPLETE ====
ubuntu@ubuntuserver2204:/etc/apache2/sites-available$ systemctl server status apache2
Unknown command verb server.
ubuntu@ubuntuserver2204:/etc/apache2/sites-available$ systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Thu 2025-01-16 11:12:31 UTC; 28min ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 2955 ExecReload=/usr/sbin/apachectl graceful (code=exited, status=0/SUCCESS)
  Main PID: 789 (apache2)
    Tasks: 6 (limit: 2226)
   Memory: 15.8M
      CPU: 319ms
   CGroup: /system.slice/apache2.service
           └─ 789 /usr/sbin/apache2 -k start
             └─ 2959 /usr/sbin/apache2 -k start
               └─ 2960 /usr/sbin/apache2 -k start
                 └─ 2961 /usr/sbin/apache2 -k start
                   └─ 2962 /usr/sbin/apache2 -k start
                     └─ 2963 /usr/sbin/apache2 -k start

Jan 16 11:12:31 ubuntuserver2204 systemd[1]: Starting The Apache HTTP Server...
Jan 16 11:12:31 ubuntuserver2204 systemd[1]: Started The Apache HTTP Server.
Jan 16 11:12:31 ubuntuserver2204 systemd[1]: Reloading The Apache HTTP Server...
Jan 16 11:12:32 ubuntuserver2204 systemd[1]: Reloaded The Apache HTTP Server.
Jan 16 11:40:16 ubuntuserver2204 systemd[1]: Reloading The Apache HTTP Server...
Jan 16 11:40:16 ubuntuserver2204 systemd[1]: Reloaded The Apache HTTP Server.
ubuntu@ubuntuserver2204:/etc/apache2/sites-available$ |
```

11.-Comprobamos que la ip funciona



12.-Corregimos el archivo de zona.

```
ubuntu@ubuntu2204: / GNU nano 6.2 /etc/bind/zones/db.antonBlagodarnyyTarea1.com *
;
; BIND data file for local loopback interface
$TTL      604800
@         IN      SOA     ns1.antonBlagodarnyyTarea1.com. admin.antonBlagodarnyyTarea1.com. (
                                2024011601 ; Serial (use a date-based format and increment for each cha
                                604800      ; Refresh
                                86400       ; Retry
                                2419200    ; Expire
                                604800 )   ; Negative Cache TTL

; Name servers
@         IN      NS      ns1.antonBlagodarnyyTarea1.com.

; A records
ns1       IN      A        192.168.56.101 ; Replace with your DNS server's IP
www       IN      A        192.168.56.101 ; Replace with your Apache server's IP

; Optional: Add more A records if needed for other services
```


13.-Corregimos el archivo de configuracion.

```
ubuntu@ubuntuserver2204: / X + v
GNU nano 6.2 /etc/bind/named.conf.options *
options {
    directory "/var/cache/bind";

    listen-on port 53 {127.0.0.1; 192.168.56.101; }; // Reemplaza 192.168.x.x por la IP interna del
    recursion no; // Deshabilita la resolución recursiva.
    allow-transfer { none; }; // Bloquea transferencias de zona.
    version "No disponible"; // Oculta la versión de Bind.

forwarders {
    8.8.8.8;
    8.8.4.4;
};

// If there is a firewall between you and nameservers you want
// to talk to, you may need to fix the firewall to allow multiple
// ports to talk. See http://www.kb.cert.org/vuls/id/800113

// If your ISP provided one or more IP addresses for stable
// nameservers, you probably want to use them as forwarders.
// Uncomment the following block, and insert the addresses replacing
// the all-0's placeholder.

// forwarders {
//     0.0.0.0;
// };

//=====
// If BIND logs error messages about the root key being expired,
// you will need to update your keys. See https://www.isc.org/bind-keys
//=====
dnssec-validation auto;

listen-on-v6 { any; };
};
```

14.-Con el comando nslookup comprobamos la resolucion del dominio.

```
C:\Users\anton>nslookup antonBlagodarnyyTareal.com 192.168.56.101
Servidor: UnKnown
Address: 192.168.56.101

Nombre: antonBlagodarnyyTareal.com
Address: 192.168.56.101

C:\Users\anton>
```