



Despliegue aplicaciones web - Anton Blagodarnyy

Tarea 5 _ Tema 3

1.-Creamos e instalamos bind9 en el servidor esclavo.

```
ubuntu@ubuntuserver2204: ~$  
System information as of Mon Mar 3 04:30:14 PM UTC 2025  
  
System load:          0.20458984375  
Usage of /:           6.0% of 97.87GB  
Memory usage:         11%  
Swap usage:           0%  
Processes:            123  
Users logged in:      1  
IPv4 address for enp0s3: 10.0.2.15  
IPv6 address for enp0s3: fd00::a00:27ff:fe0b:1b85  
IPv4 address for enp0s8: 192.168.56.102  
  
* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s  
just raised the bar for easy, resilient and secure K8s cluster deployment.  
  
https://ubuntu.com/engage/secure-kubernetes-at-the-edge  
  
130 updates can be applied immediately.  
To see these additional updates run: apt list --upgradable  
  
The list of available updates is more than a week old.  
To check for new updates run: sudo apt update  
New release '24.04.2 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
Last login: Mon Mar 3 16:27:52 2025  
ubuntu@ubuntuserver2204:~$ sudo apt install bind9 bind9-utils bind9-doc -y
```

2.-En el servidor maestro agregamos la configuracion del servidor esclavo.

```
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 "periodista.com" {  
    type master;  
    file "/etc/bind/db.periodista.com";  
};  
  
zone "192.168.1.in-addr.arpa" {  
    type master;  
    file "/etc/bind/db.192.168.1";  
};  
  
acl dns-slaves {  
    192.168.56.102; # IP del servidor esclavo  
};  
  
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo  
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line  M-E Redo
```

3.-Tocamos la registros del servidor para agregarles los del esclavo.

```
ubuntu@ubuntu2204: ~$ nano /etc/bind/db.periodista.com
GNU nano 6.2 /etc/bind/db.periodista.com *
$TTL 86400
@ IN SOA ns1.periodista.com. admin.periodista.com. (
    2024022301 ; Serial
    3600       ; Refresh
    1800       ; Retry
    604800    ; Expire
    86400     ; Minimum TTL
)

; Servidores de nombres
@ IN NS ns1.periodista.com.
@ IN NS ns2.periodista.com.
; Registros A
ns1 IN A 192.168.1.1
ns2 IN A 192.168.1.2
www IN A 192.168.1.2
mail IN A 192.168.1.3

; Registro MX
@ IN MX 10 mail.periodista.com.

; Registro SRV
_xmpp._tcp IN SRV 10 5 5223 chat.periodista.com.
chat IN A 192.168.1.4
```

4.-Corregimos la configuracion. Faltaba la linea de allow-transfer {dns-slaves}.

```
ubuntu@ubuntu2204: ~$ nano /etc/bind/named.conf.local
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 "periodista.com" {
    type master;
    file "/etc/bind/db.periodista.com";
    allow-transfer { dns-slaves; };
};

zone "192.168.1.in-addr.arpa" {
    type master;
    file "/etc/bind/db.192.168.1";
};

acl dns-slaves {
    192.168.56.102;
};
```

5.-Agregamos los registros al archivo de configuración de la zona inversa.

```
ubuntu@ubuntu2204: ~$ nano /etc/bind/db.192.168.1
GNU nano 6.2 /etc/bind/db.192.168.1
$TTL 86400
@ IN SOA ns1.periodista.com. admin.periodista.com. (
    2024022301 ; Serial
    3600       ; Refresh
    1800       ; Retry
    604800     ; Expire
    86400      ; Minimum TTL
)

; Servidores de nombres
@ IN NS ns1.periodista.com.
@ IN NS ns2.periodista.com.

; Registros PTR
1 IN PTR ns1.periodista.com.
2 IN PTR www.periodista.com.
3 IN PTR mail.periodista.com.
4 IN PTR chat.periodista.com.
5 IN PTR ns2.periodista.com.
```

6.-Comprobamos la sintaxis.

```
ubuntu@ubuntu2204: ~$ cat /etc/bind/named.conf.local
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage

System information as of Tue Mar 4 10:22:42 AM UTC 2025

System load: 1.11181640625
Usage of /: 6.0% of 97.87GB
Memory usage: 12%
Swap usage: 0%
Processes: 120
Users logged in: 0
IPv4 address for enp0s3: 10.0.2.15
IPv6 address for enp0s3: fd00::a00:27ff:fe0b:1b85

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130 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Tue Mar 4 10:22:44 2025
ubuntu@ubuntu2204:~$ sudo nano /etc/bind/named.conf.local
ubuntu@ubuntu2204:~$ sudo nano /etc/bind/db.192.168.1
ubuntu@ubuntu2204:~$ sudo named-checkconf
ubuntu@ubuntu2204:~$ sudo named-checkzone periodista.com /etc/bind/db.periodista
zone periodista.com/IN: loading from master file /etc/bind/db.periodista failed: file not found
zone periodista.com/IN: not loaded due to errors.
ubuntu@ubuntu2204:~$ sudo named-checkzone periodista.com /etc/bind/db.periodista
zone periodista.com/IN: loaded serial 2024022301
OK
ubuntu@ubuntu2204:~$ sudo named-checkzone 1.168.192.in-addr.arpa /etc/bind/db.192.168.1
zone 1.168.192.in-addr.arpa/IN: loaded serial 2024022301
OK
ubuntu@ubuntu2204:~$
```

7.-Reiniciamos el servicio.

```
ubuntu@ubuntuserver2204:~$ sudo systemctl restart bind9
ubuntu@ubuntuserver2204:~$ sudo systemctl enable bind9
Failed to enable unit: Refusing to operate on alias name or linked unit file: bind9.service
ubuntu@ubuntuserver2204:~$ sudo systemctl enable named
Synchronizing state of named.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable named
```

8.-Configuramos el servidor esclavo.

```
GNU nano 6.2 /etc/bind/named.conf.local
zone "periodista.com" {
    type slave;          # Servidor esclavo
    file "db.periodista.com"; # Archivo que se creará con la transferencia
    masters { 192.168.56.102; }; # IP del servidor maestro
};

zone "1.168.192.in-addr.arpa" {
    type slave;
    file "db.192.168.1";
    masters { 192.168.1.1; };
};
//
// Do any local configuration here
//

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

9.-Corregimos la configuracion del servidor maestro. El apartado del acl debe ir antes del de la zona.

```
ubuntu@ubuntuserver2204: ~  
GNU nano 6.2 /etc/bind/named.conf.local S  
//  
// Do any local configuration here  
//  
  
// Consider adding the 1918 zones here, if they are not used in your  
// organization  
//include "/etc/bind/zones.rfc1918";  
  
acl dns-slaves {  
    192.168.56.103; # IP del servidor esclavo  
};  
  
zone "periodista.com" {  
    type master;  
    file "/etc/bind/db.periodista.com";  
    allow-transfer { dns-slaves; };  
};  
  
zone "192.168.1.in-addr.arpa" {  
    type master;  
    file "/etc/bind/db.192.168.1";  
};
```

10.-Despues de reinicar el servidor esclavo. Comprobamos que se ha transferido el archivo.

```
ubuntu@ubuntuserver2204:~$ ls /var/cache/bind/  
db.periodista.com managed-keys.bind managed-keys.bind.jnl  
ubuntu@ubuntuserver2204:~$ A|
```

11.-Hacemos dig dentro del servidor esclavo.

```
ubuntu@ubuntu-server2204:~$ dig @127.0.0.1 www.periodista.com
; <<>> DiG 9.18.30-0ubuntu0.22.04.2-Ubuntu <<>> @127.0.0.1 www.periodista.com
; (1 server found)
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 47134
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1
;; OPT PSEUDOSECTION:
;; EDNS: version: 0, flags:; udp: 1232
;; COOKIE: 1aee21cb2d775d500100000067c6da0732b9e394ea4304d2 (good)
;; QUESTION SECTION:
;www.periodista.com.                IN      A
;; ANSWER SECTION:
www.periodista.com.                86400   IN      A      192.168.1.2
;; Query time: 0 msec
;; SERVER: 127.0.0.1#53(127.0.0.1) (UDP)
;; WHEN: Tue Mar 04 10:46:31 UTC 2025
;; MSG SIZE rcvd: 91
```

12.-Apagamos el servidor maestro.

```
ubuntu@ubuntu-server2204:~$ sudo systemctl stop bind9
ubuntu@ubuntu-server2204:~$ |
```

13.-Y desde el cliente comprobamos que funciona el servidor esclavo.

```
C:\Users\anton>nslookup www.periodista.com 192.168.56.103
Servidor:  UnKnown
Address:  192.168.56.103

Nombre:   www.periodista.com
Address:  192.168.1.2
```