

Je configure la carte réseau pour toutes les machines

Je modifie le serveur dns

```
GNU nano 7.2                               /etc/bind/named.conf.options

options {
    directory "/var/cache/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 {
        172.16.10.20;
        172.16.20.21;
    };

    allow-query {192.168.0.0/16; 172.16.10.0/24; localnets;};
    //================================================================
    // 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 no;

    auth-nxdomain no;    # conform to RFC1035
    listen-on-v6 { any; };
};
```

Je vérifie qu'il n'y a pas d'erreur avec la commande systemctl bind9 status

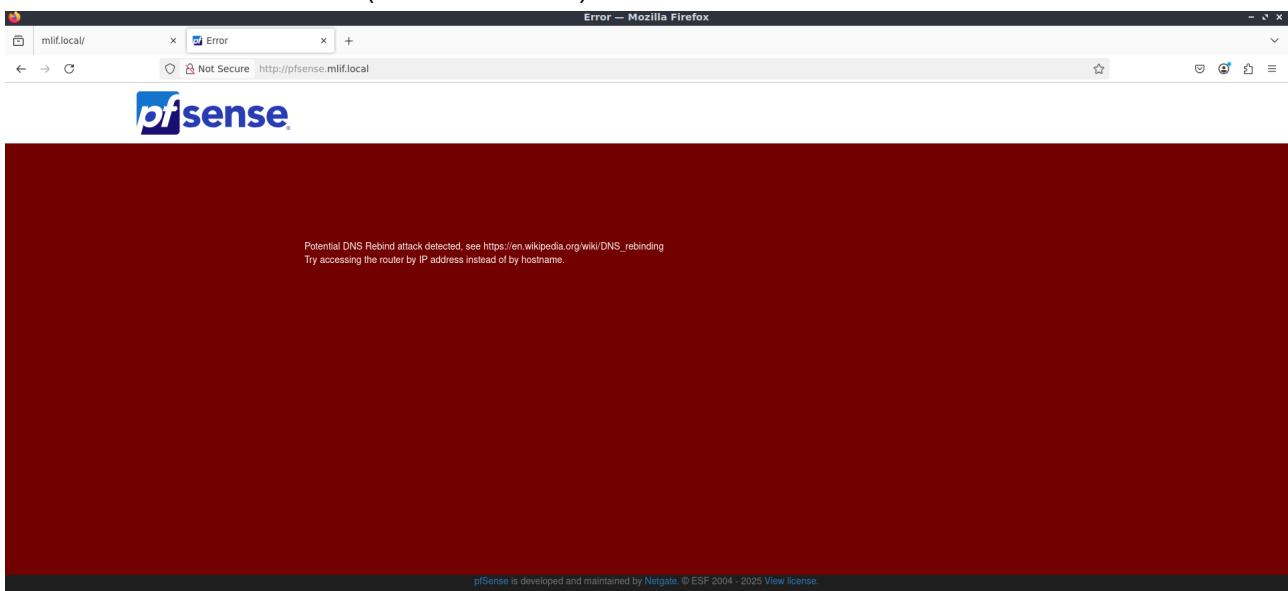
```
root@messagelab:~# systemctl restart bind9
root@messagelab:~# systemctl status bind9
● named.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/named.service; enabled; preset: enabled)
   Active: active (running) since Fri 2025-09-12 16:39:11 CEST; 7s ago
     Docs: man:named(8)
 Main PID: 983 (named)
   Status: "running"
     Tasks: 4 (limit: 1097)
    Memory: 11.1M
      CPU: 23ms
     CGroup: /system.slice/named.service
             └─983 /usr/sbin/named -f -u bind

sept. 12 16:39:11 messagelab named[983]: zone 255.in-addr.arpa/IN: loaded serial 1
sept. 12 16:39:11 messagelab named[983]: zone 0.in-addr.arpa/IN: loaded serial 1
sept. 12 16:39:11 messagelab named[983]: zone 100.168.192.in-addr.arpa/IN: loaded serial 9
sept. 12 16:39:11 messagelab named[983]: zone localhost/IN: loaded serial 2
sept. 12 16:39:11 messagelab named[983]: zone 127.in-addr.arpa/IN: loaded serial 1
sept. 12 16:39:11 messagelab named[983]: zone 200.168.192.in-addr.arpa/IN: loaded serial 1
sept. 12 16:39:11 messagelab named[983]: zone mlif.local/IN: loaded serial 11
sept. 12 16:39:11 messagelab named[983]: all zones loaded
sept. 12 16:39:11 messagelab systemd[1]: Started named.service - BIND Domain Name Server.
sept. 12 16:39:11 messagelab named[983]: running
root@messagelab:~#
```

## Je test un accès au serveur web



## Je me rends sur PFSENSE (192.168.50.254)



## Les ping fonctionnent

```
Last login: Thu Apr 27 22:47:15 CEST 2023 on ttys1
root@www:~# ping messagelab.mlif.local
PING messagelab.mlif.local (192.168.100.10) 56(84) bytes of data.
64 bytes from messagelab.mlif.local (192.168.100.10): icmp_seq=1 ttl=63 time=0.359 ms
64 bytes from messagelab.mlif.local (192.168.100.10): icmp_seq=2 ttl=63 time=0.701 ms
64 bytes from messagelab.mlif.local (192.168.100.10): icmp_seq=3 ttl=63 time=0.668 ms
^C
--- messagelab.mlif.local ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2010ms
rtt min/avg/max/mdev = 0.359/0.576/0.701/0.154 ms
root@www:~#
```

```
root@www:~# nslookup www.mlif.local
Server:          192.168.100.10
Address:         192.168.100.10#53

Name:   www.mlif.local
Address: 192.168.200.5
```

```
root@www:~# ping www.cisco.com
PING e2867.dsca.akamaiedge.net (2.20.10.35) 56(84) bytes of data.
64 bytes from a2-20-10-35.deploy.static.akamaitechnologies.com (2.20.10.35): icmp_seq=1 ttl=53 time=7.70 ms
64 bytes from a2-20-10-35.deploy.static.akamaitechnologies.com (2.20.10.35): icmp_seq=2 ttl=53 time=8.04 ms
64 bytes from a2-20-10-35.deploy.static.akamaitechnologies.com (2.20.10.35): icmp_seq=3 ttl=53 time=7.49 ms
^C
--- e2867.dsca.akamaiedge.net ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2003ms
rtt min/avg/max/mdev = 7.490/7.743/8.042/0.227 ms
root@www:~#
```

## Je me connecte sur le pfSense

The screenshot shows the pfSense Status / Dashboard page. It displays the following system information:

- Name:** pf-firewall.mlif.local
- User:** admin@192.168.50.10 (Local Database)
- System:** VirtualBox Virtual Machine  
Netgate Device ID: 94bb399ae96f663a9d0a
- BIOS:** Vendor: innoteck GmbH  
Version: VirtualBox  
Release Date: Fri Dec 1 2006
- Version:** 2.7.0-RELEASE (amd64)  
built on Wed Jun 28 03:53:34 UTC 2023  
FreeBSD 14.0-CURRENT
- CPU Type:** AMD Ryzen 7 PRO 5750G with Radeon Graphics  
AES-NI CPU Crypto: Yes (inactive)  
QAT Crypto: No
- Hardware crypto:** Inactive
- Kernel PTI:** Disabled
- MDS Mitigation:** Inactive

The right side of the dashboard includes a "Netgate Services And Support" section with a "Community Support Only" contract type. It also features a "NETGATE AND pfSense COMMUNITY SUPPORT RESOURCES" section with links to various support resources.

## Je me rends sur l'onglet firewall puis Rules

The screenshot shows the pfSense Firewall / Rules / WAN page. The "WAN" tab is selected. The interface includes tabs for Floating, WAN, LAN, SRV, and DMZ. Below the tabs is a table titled "Rules (Drag to Change Order)" with columns for States, Protocol, Source, Port, Destination, Port, Gateway, Queue, Schedule, Description, and Actions. A message at the top states: "No rules are currently defined for this interface. All incoming connections on this interface will be blocked until pass rules are added. Click the button to add a new rule." At the bottom of the table are several action buttons: Add, Delete, Toggle, Copy, Save, and Separator.

## Je supprime les règle DMZ

The screenshot shows the pfSense Firewall Rules / DMZ interface. A single rule is listed in the table:

	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input type="checkbox"/>	0/5 Kib	IPv4 *	*	*	*	*	*	none			

Below the table are buttons for Add, Delete, Toggle, Copy, Save, and Separator.

## Je supprime les règles lié au serveur

The screenshot shows the pfSense Firewall Rules / SRV interface. A message at the top indicates successful changes and a background reload:

The changes have been applied successfully. The firewall rules are now reloading in the background.  
Monitor the filter reload progress.

No rules are currently defined for this interface. All incoming connections on this interface will be blocked until pass rules are added. Click the button to add a new rule.

Below the message, there is a table header and a note about adding a new rule. At the bottom are buttons for Add, Delete, Toggle, Copy, Save, and Separator.

## Je supprime les règles Clients

The screenshot shows the pfSense Firewall Rules / WAN interface. Similar to the SRV interface, it displays a message about successful changes and a note about adding a new rule:

The changes have been applied successfully. The firewall rules are now reloading in the background.  
Monitor the filter reload progress.

No rules are currently defined for this interface. All incoming connections on this interface will be blocked until pass rules are added. Click the button to add a new rule.

Below the message, there is a table header and a note about adding a new rule. At the bottom are buttons for Add, Delete, Toggle, Copy, Save, and Separator.

Suite a mes modifications , les pings ne fonctionnent plus

```
root@www:~# ping messagelab.mlif.local
^C
root@www:~# ping www.cisco.com
^C
root@www:~# _
```

## STOP1

J'ai ajouté les aliases pour les adresses IP

IP	Ports	URLs	All
Firewall Aliases IP			
Name	Values	Description	Actions
DEBIAN_TRAINING_DMZ	192.168.200.5		
DEBIAN_TRAINING_SERVEUR	192.168.100.10		
IPS_DNS_LYCEE	IP_DNS_LYCEE_1, IPS_DNS_LYCEE_2		
IPS_DNS_LYCEE_2	172.16.10.21		
IP_BLACKLIST_CLIENTS	192.168.50.20		
IP_DNS_LYCEE_1	172.16.10.20		
SRV_DNS	192.168.100.10		
SRV_FTP	192.168.100.10		
SRV_MAIL	192.168.100.10		

Add  Import

J'ai ajouté les aliasses concernant les ports

IP Ports URLs All

### Firewall Aliases Ports

Name	Values	Description	Actions
PORT_DNS	53		
PORT_IMAP	143		
PORT_MAIL	PORT_IMAP, PORT_SMTP		
PORT_SMTP	25		
PORT_WEB	80, 443		

Add Import

**WARNING:** The 'admin' account password is set to the default value. Change the password in the User Manager.

Firewall / Rules / DMZ

Floating WAN LAN SRV DMZ

### Rules (Drag to Change Order)

	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input type="checkbox"/>	0/0 B	IPv4 UDP	DMZ net	*	SRV_DNS	53 (DNS)	*	none			

Add Add Delete Toggle Copy Save Separator

**WARNING:** The 'admin' account password is set to the default value. Change the password in the User Manager.

Firewall / Rules / LAN

Floating WAN LAN SRV DMZ

### Rules (Drag to Change Order)

	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	1/2.23 MiB	*	*	*	LAN Address	80	*	*		Anti-Lockout Rule	
<input type="checkbox"/>	0/0 B	IPv4 UDP	IP_BLACKLIST_CLIENTS	*	SRV_DNS	53 (DNS)	*	none			
<input checked="" type="checkbox"/>	9/12 KiB	IPv4 UDP	LAN net	*	SRV_DNS	53 (DNS)	*	none			

Add Add Delete Toggle Copy Save Separator

```
root@www: #
root@www:~# systemctl restart networking
root@www:~#
```

## R1 VALIDÉ

## R2 VALIDÉ

Firewall / Rules / SRV

Floating WAN LAN **SRV** DMZ

**Rules (Drag to Change Order)**

States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	0/4 KiB	IPv4 UDP	SRV_DNS	*	IPS_DNS_LYCEE	53 (DNS)	*	none		

Add Add Delete Toggle Copy Save Separator

## R3 VALIDÉ

Firewall / Rules / SRV

The changes have been applied successfully. The firewall rules are now reloading in the background.  
Monitor the filter reload progress.

Floating WAN LAN **SRV** DMZ

**Rules (Drag to Change Order)**

States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	0/0 B	IPv4 TCP	DEBIAN_TRAINING_DMZ	*	DEBIAN_TRAINING_DMZ	*	*	none		
<input checked="" type="checkbox"/>	4/10 KiB	IPv4 UDP	SRV_DNS	*	IPS_DNS_LYCEE	53 (DNS)	*	none		

Add Add Delete Toggle Copy Save Separator

Firewall / Rules / LAN

The changes have been applied successfully. The firewall rules are now reloading in the background.  
Monitor the filter reload progress.

Floating WAN **LAN** SRV DMZ

**Rules (Drag to Change Order)**

States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	1/2.75 MiB	*	*	*	LAN Address	80	*	*	Anti-Lockout Rule	
<input checked="" type="checkbox"/>	0/0 B	IPv4 TCP	LAN net	*	*	PORT_WEB	*	none	LE CLIENT ACCÈDE À INTERNET	
<input checked="" type="checkbox"/>	0/0 B	IPv4 UDP	IP_BLACKLIST_CLIENTS	*	SRV_DNS	53 (DNS)	*	none		
<input checked="" type="checkbox"/>	2/194 KiB	IPv4 UDP	LAN net	*	SRV_DNS	53 (DNS)	*	none		

Add Add Delete Toggle Copy Save Separator

## R4

## STOP 2

Firewall / NAT / Port Forward ?

The changes have been applied successfully. The firewall rules are now reloading in the background.  
Monitor the filter reload progress. X

Port Forward    1:1    Outbound    NPt

Actions	Description	NAT Ports	NAT IP	Dest. Ports	Dest. Address	Source Ports	Source Address	Protocol	Interface	□
			PORT_WEB	192.168.200.5	WAN address	*	*	TCP	WAN	<input checked="" type="checkbox"/>

Add Add Delete Toggle Save Separator