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2º ASIR  
Seguridad y alta disponibilidad  
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## PRÁCTICA 9

### CREACIÓN DE REGLAS DE FILTRADO

#### 1. Accedemos a las reglas del firewall

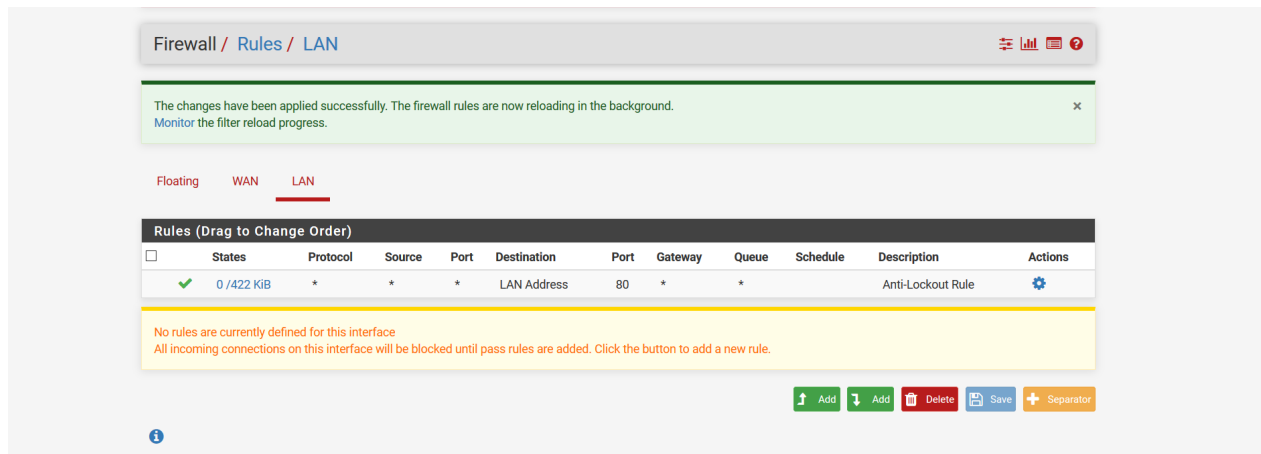
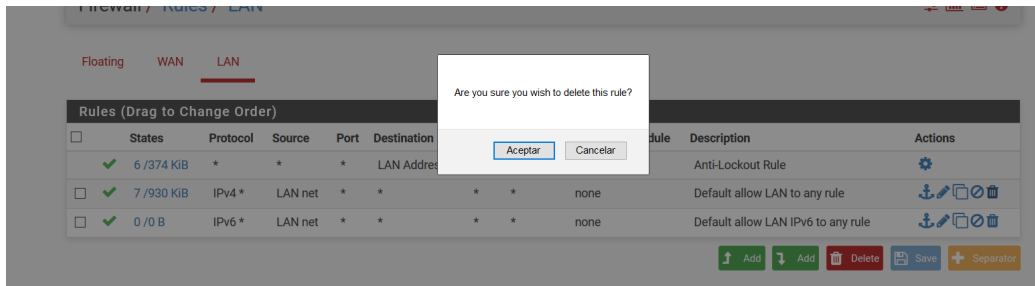
The screenshot shows the pfSense web interface. The 'Firewall' menu is open, showing options: Aliases, NAT, Rules, Schedules, Traffic Shaper, and Virtual IPs. The 'Rules' option is selected. The 'System Information' panel on the left displays details about the pfSense instance, including the name 'pfSense.localdomain', user 'admin@192.168.88.184', system 'VirtualBox Virtual Machine', BIOS 'Vendor: innotek GmbH', version '2.4.4-RELEASE-p3', CPU type 'Intel(R) Core(TM) i7-9750H CPU @ 2.60GHz', and uptime '00 Hour 31 Minutes 14 Seconds'. The 'Netgate Services And Support' panel on the right provides information about community support resources.

Por defecto nos aparecerán las reglas correspondientes al permiso de cualquier tipo de tráfico saliente para IPv4 y IPv6.

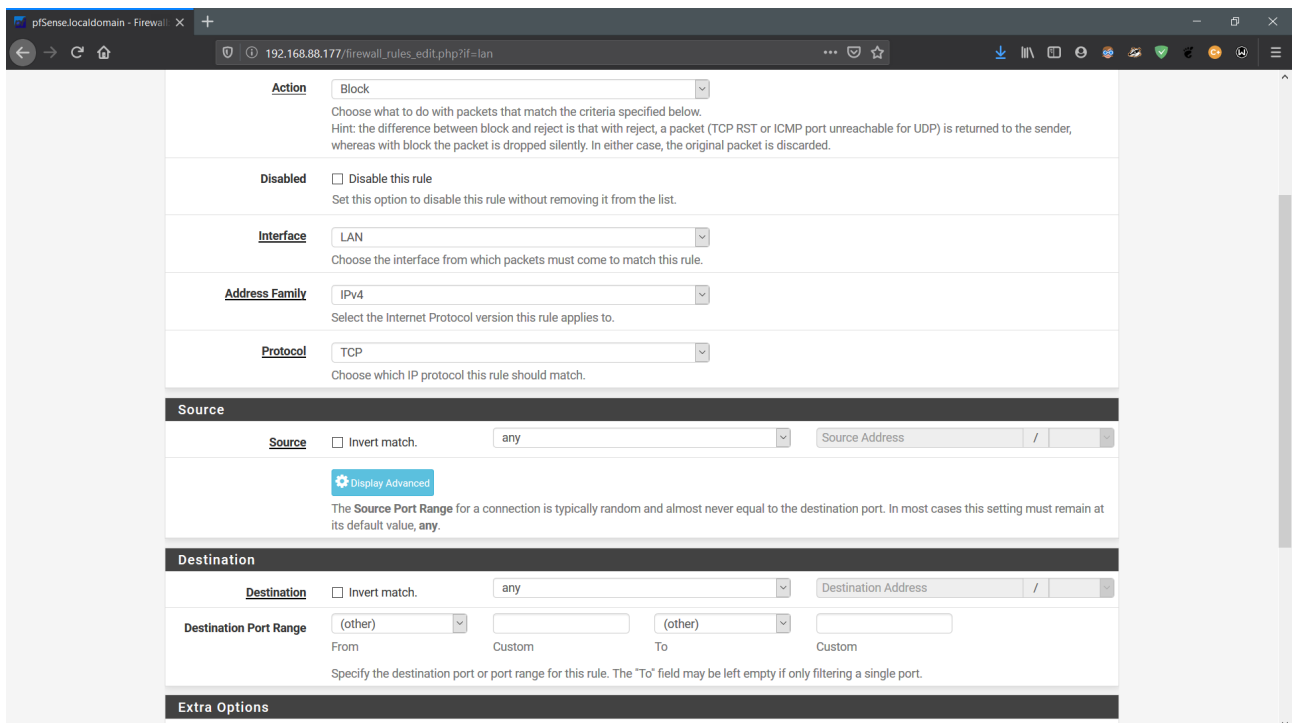
Rules (Drag to Change Order)											
<input type="checkbox"/>	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	6 / 374 KiB	*	*	*	LAN Address	80	*	*		Anti-Lockout Rule	
<input checked="" type="checkbox"/>	7 / 930 KiB	IPv4 *	LAN net	*	*	*	*	none		Default allow LAN to any rule	
<input checked="" type="checkbox"/>	0 / 0 B	IPv6 *	LAN net	*	*	*	*	none		Default allow LAN IPv6 to any rule	

Buttons: Add, Add, Delete, Save, Separator

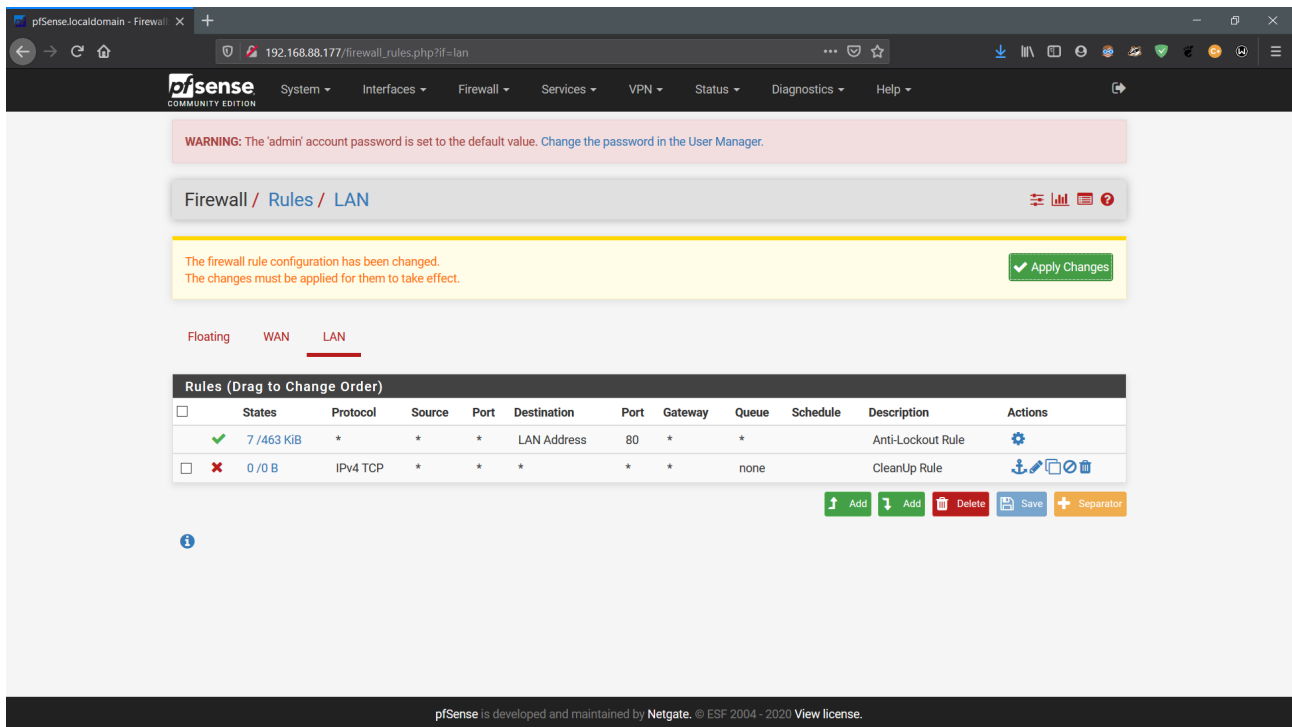
## Borramos las reglas correspondientes al tráfico saliente de IPv4 y IPv6



## Añadimos una CleanUp Rule



## Aplicamos los cambios y hacemos lo mismo para IPv6



WARNING: The 'admin' account password is set to the default value. [Change the password in the User Manager.](#)

Firewall / Rules / LAN

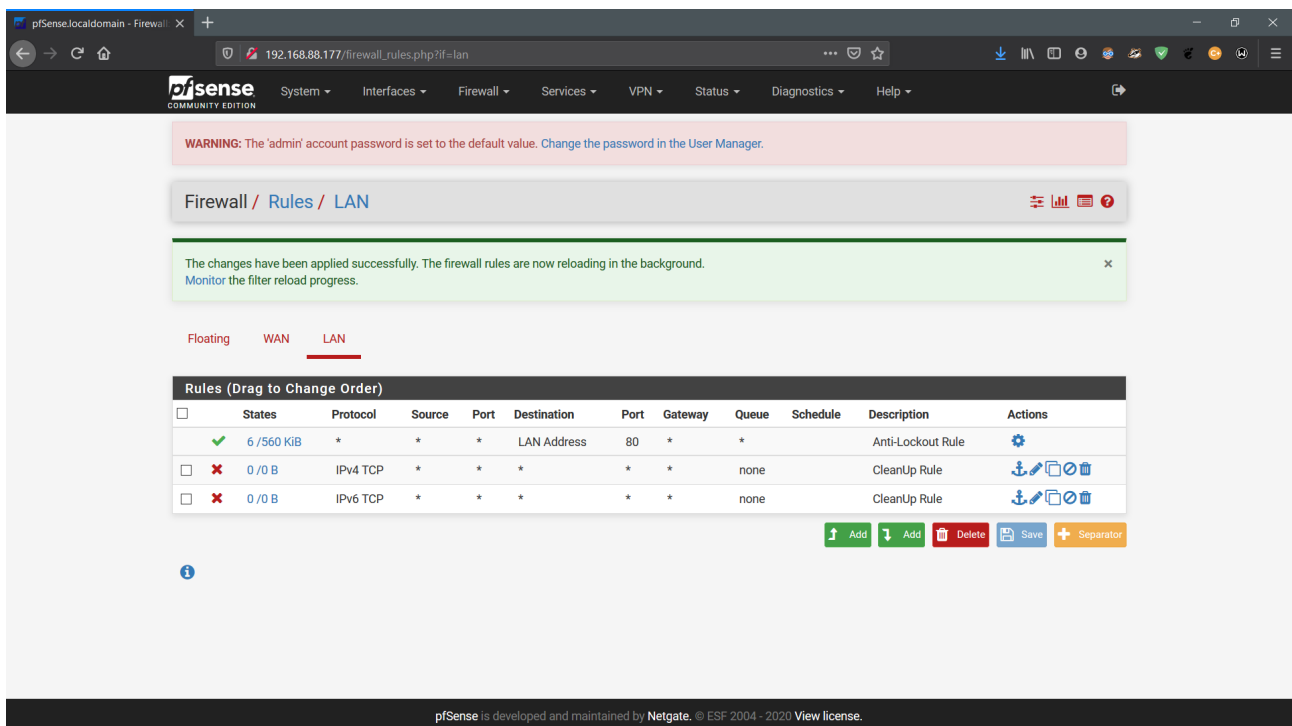
The firewall rule configuration has been changed.  
The changes must be applied for them to take effect. [Apply Changes](#)

Floating WAN LAN

Rules (Drag to Change Order)											
	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	✓	7 / 463 KiB	*	*	LAN Address	80	*	*		Anti-Lockout Rule	<a href="#">Settings</a>
<input type="checkbox"/>	✗	0 / 0 B	IPv4 TCP	*	*	*	*	none		CleanUp Rule	<a href="#">Anchor</a> <a href="#">Edit</a> <a href="#">Copy</a> <a href="#">Delete</a>

[Add](#) [Add](#) [Delete](#) [Save](#) [Separator](#)

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WARNING: The 'admin' account password is set to the default value. [Change the password in the User Manager.](#)

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

Rules (Drag to Change Order)											
	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	✓	6 / 560 KiB	*	*	LAN Address	80	*	*		Anti-Lockout Rule	<a href="#">Settings</a>
<input type="checkbox"/>	✗	0 / 0 B	IPv4 TCP	*	*	*	*	none		CleanUp Rule	<a href="#">Anchor</a> <a href="#">Edit</a> <a href="#">Copy</a> <a href="#">Delete</a>
<input type="checkbox"/>	✗	0 / 0 B	IPv6 TCP	*	*	*	*	none		CleanUp Rule	<a href="#">Anchor</a> <a href="#">Edit</a> <a href="#">Copy</a> <a href="#">Delete</a>

[Add](#) [Add](#) [Delete](#) [Save](#) [Separator](#)

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Ahora debemos hacer visible ambas reglas para ello debemos ir a Aliases y modificar todos los Alias

pfSense.localdomain - Firewall

192.168.88.177/firewall\_rules.php?if=lan

System Interfaces Firewall Services VPN Status Diagnostics Help

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Firewall / Rules / LAN

The changes have been applied successfully. The firewall rules are now reloading in the background. [Monitor the filter reload progress.](#)

Aliases

NAT

Rules

Schedules

Traffic Shaper

Virtual IPs

pfSense.localdomain - Firewall

192.168.88.177/firewall\_aliases\_edit.php?tab=ip

System Interfaces Firewall Services VPN Status Diagnostics Help

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Firewall / Aliases / Edit

Properties

Name

equipo\_admin1

The name of the alias may only consist of the characters "a-z, A-Z, 0-9 and \_".

Description

Admin

A description may be entered here for administrative reference (not parsed).

Type

Host(s)

Host(s)

Hint

Enter as many hosts as desired. Hosts must be specified by their IP address or fully qualified domain name (FQDN). FQDN hostnames are periodically re-resolved and updated. If multiple IPs are returned by a DNS query, all are used. An IP range such as 192.168.1.1-192.168.1.10 or a small subnet such as 192.168.1.16/28 may also be entered and a list of individual IP addresses will be generated.

IP or FQDN

192.168.88.177

Description

Save

Add Host

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pfSense.localdomain - Firewall

192.168.88.177/firewall\_aliases.php?tab=all

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Firewall / Aliases / All

The changes have been applied successfully. The firewall rules are now reloading in the background. [Monitor the filter reload progress.](#)

IP

Ports

URLs

All

Firewall Aliases All

Name	Values	Description	Actions
Admin2	192.168.88.180	Admin2	<a href="#">Edit</a> <a href="#">Delete</a>
Admin_Yago	192.168.88.180	Admin	<a href="#">Edit</a> <a href="#">Delete</a>
Equipos_C	192.168.88.170/31, 192.168.88.172/30, 192.168.88.176/29, 192.168.88.184/30, 192.168.88.188/31, 192.168.88.190/32	Equipos	<a href="#">Edit</a> <a href="#">Delete</a>
Puertos	22, 443	Puertos	<a href="#">Edit</a> <a href="#">Delete</a>
Servidores_DNS	dns_1, dns_2	serv DNS	<a href="#">Edit</a> <a href="#">Delete</a>
dns_1	192.168.88.253	dns_1	<a href="#">Edit</a> <a href="#">Delete</a>
dns_2	8.8.8.8	dns_2	<a href="#">Edit</a> <a href="#">Delete</a>

Add

Import

# Configuramos el DNS Rule

pfSense.localdomain - Firewall

192.168.88.177/firewall\_rules.php?f=lan

System Interfaces Firewall Services VPN Status Diagnostics Help

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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

Rules (Drag to Change Order)

	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input type="checkbox"/>	✓ 6 / 996 KIB	*	*	*	LAN Address	80	*	*		Anti-Lockout Rule	
<input type="checkbox"/>	✓ 0 / 0 B	IPv4 UDP	LAN net	*	Servidores_DNS	53 (DNS)	*	none			
<input type="checkbox"/>	✗ 0 / 0 B	IPv4 TCP	*	*	*	*	*	none		CleanUp Rule	
<input type="checkbox"/>	✗ 0 / 0 B	IPv6 TCP	*	*	*	*	*	none		CleanUp Rule	

Add Add Delete Save Separator

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pfSense.localdomain - Firewall

192.168.88.177/firewall\_rules.php?f=lan

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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

Rules (Drag to Change Order)

	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input type="checkbox"/>	✓ 0 / 1006 KIB	*	*	*	LAN Address	80	*	*		Anti-Lockout Rule	
<input type="checkbox"/>	✓ 0 / 0 B	IPv4 UDP	LAN net	*	Servidores_DNS	53 (DNS)	*	none			
<input type="checkbox"/>	✓ 0 / 0 B	IPv4 TCP	LAN net	*	Puertos	*	*	none			
<input type="checkbox"/>	✗ 0 / 0 B	IPv4 TCP	*	*	*	*	*	none		CleanUp Rule	
<input type="checkbox"/>	✗ 0 / 0 B	IPv6 TCP	*	*	*	*	*	none		CleanUp Rule	

Add Add Delete Save Separator

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# Creamos reglas para los horarios

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192.168.88.177/firewall\_schedule\_edit.php

System Interfaces Firewall Services VPN Status Diagnostics Help

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Firewall / Schedules / Edit

**Schedule Information**

**Schedule Name**

The name of the schedule may only consist of the characters "a-z, A-Z, 0-9 and \_".

**Description**

A description may be entered here for administrative reference (not parsed).

**Month**

**Date**

January_2020						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Click individual date to select that date only. Click the appropriate weekday Header to select all occurrences of that weekday.

**Time**

Start Hrs Start Mins Stop Hrs Stop Mins

pfSense.localdomain - Firewall

192.168.88.177/firewall\_schedule\_edit.php

System Interfaces Firewall Services VPN Status Diagnostics Help

**Schedule Information**

**Schedule Name**

The name of the schedule may only consist of the characters "a-z, A-Z, 0-9 and \_".

**Description**

A description may be entered here for administrative reference (not parsed).

**Month**

**Date**

January_2020						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Click individual date to select that date only. Click the appropriate weekday Header to select all occurrences of that weekday.

**Time**

Start Hrs Start Mins Stop Hrs Stop Mins

Select the time range for the day(s) selected on the Month(s) above. A full day is 0:00-23:59.

**Time range description**

A description may be entered here for administrative reference (not parsed).

Schedules			
	Name	Range: Date / Times / Name	Description
	Comercial	January 1 - 3 January 6 - 10 January 13 - 17 January 20 - 24 January 27 - 31 / 8:00-23:59 /	Horario Comercial

ⓘ Indicates that the schedule is currently active.

VLAN Prio Set none  
Choose 802.1p priority to apply.

Schedule none  
none  
**Comercial**  
Default

Gateway  
Leave as 'default' to use the system routing table. Or choose a gateway to utilize policy based routing.  
Gateway selection is not valid for "IPv4+IPv6" address family.

In / Out pipe none none  
Choose the Out queue/Virtual interface only if In is also selected. The Out selection is applied to traffic leaving the interface where the rule is created,

pfSense.localdomain - Firewall

192.168.177/firewall\_rules.php?if=lan

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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

Rules (Drag to Change Order)

	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	0 / 1.06 MIB	*	*	*	LAN Address	80	*	*		Anti-Lockout Rule	
<input type="checkbox"/>	0 / 0 B	IPv4 UDP	LAN net	*	Servidores_DNS	53 (DNS)	*	none			
<input type="checkbox"/>	0 / 0 B	IPv4 TCP	LAN net	*		Puertos	*	none	Comercial		
<input type="checkbox"/>	0 / 0 B	IPv4 TCP	*	*	*	*	*	none		CleanUp Rule	
<input type="checkbox"/>	0 / 0 B	IPv6 TCP	*	*	*	*	*	none		CleanUp Rule	

Add Add Delete Save Separator

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pfSense.localdomain - Firewall

192.168.88.184/firewall\_rules.php?if=lan

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Firewall / Rules / LAN

Floating WAN LAN

Rules (Drag to Change Order)

	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	6 / 1.12 MIB	*	*	*	LAN Address	80	*	*		Anti-Lockout Rule	
<input type="checkbox"/>	0 / 0 B	IPv4 TCP	Admin_Yago	*	*	Puertos	*	none		Anti-Lockdown Rule	
<input type="checkbox"/>	0 / 0 B	IPv4 TCP	*	*	*	Puertos	*	none		Anti-Lockdown Rule	
<input type="checkbox"/>	0 / 0 B	IPv4 UDP	LAN net	*	Servidores_DNS	53 (DNS)	*	none		Consultas DNS	
<input type="checkbox"/>	0 / 0 B	IPv4 TCP	Equipos_C	*	*	Puertos	*	none	Comercial	Trafico web Dpto Comercial	
<input type="checkbox"/>	0 / 19 KiB	IPv4 *	Equipos_C	*	*	*	*	none		Bloquear todo trafico Equipos Comercial	
<input type="checkbox"/>	0 / 0 B	IPv4 TCP	LAN net	*	*	Puertos	*	none		Trafico web	
<input type="checkbox"/>	0 / 0 B	IPv4 TCP	*	*	*	*	*	none		CleanUp Rule	
<input type="checkbox"/>	0 / 0 B	IPv6 TCP	*	*	*	*	*	none		CleanUp Rule	

Add Add Delete Save Separator

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Ahora desactivamos el Anti-Lockdown predeterminado