

Configuration réseau & VLANs

VLANs & règles permissives / restrictives



Interfaces réseau Proxmox

Editer l'interface LAN
relié à pfsense, cocher
"VLAN aware" pour qu'il
transporte les VLANs que
l'on va définir directement
dans pfSense qui sera
notre point central de
roulage.

The screenshot shows the Proxmox VE 9.0.3 interface. On the left, the 'Datacenter' view shows a list of VMs and containers. The 'Network' tab is selected in the left sidebar. The main panel displays a table of network interfaces. The 'vmbr0' interface is highlighted, and the 'Edit: Linux Bridge' dialog is open. In this dialog, the 'VLAN aware' checkbox is checked, indicated by a yellow arrow. The 'Bridge ports' field is set to 'eno1'. The 'MTU' is set to 1500 and 'VLAN IDs' to 2-4094. The 'Advanced' checkbox is also checked.

Name	Alternative Names	Type	Active	Autostart	VLAN a...	Ports/Slaves	Bond Mode	CIDR	Gateway
enx1866da01f63									
enp5s0f0	enxa0369fcb01f0	Network Device	No	No	No				
enp5s0f1	enxa0369fcb01f2	Network Device	No	No	No				
enp7s0f0	enxa0369fcb0200	Network Device	No	No	No				
enp7s0f1	enxa0369fcb0202	Network Device	No	No	No				
vmbr0		Linux Bridge	Yes	Yes	No	eno1		192.168.100.2/24	
vmbr1		Linux Bridge	Yes	Yes	No	eno2			

Edit: Linux Bridge

Name: vmbr0 Autostart: ☒

IPv4/CIDR: 192.168.100.2/24 VLAN aware: ☒ ←

Gateway (IPv4): Bridge ports: eno1

IPv6/CIDR: Comment:

Gateway (IPv6):

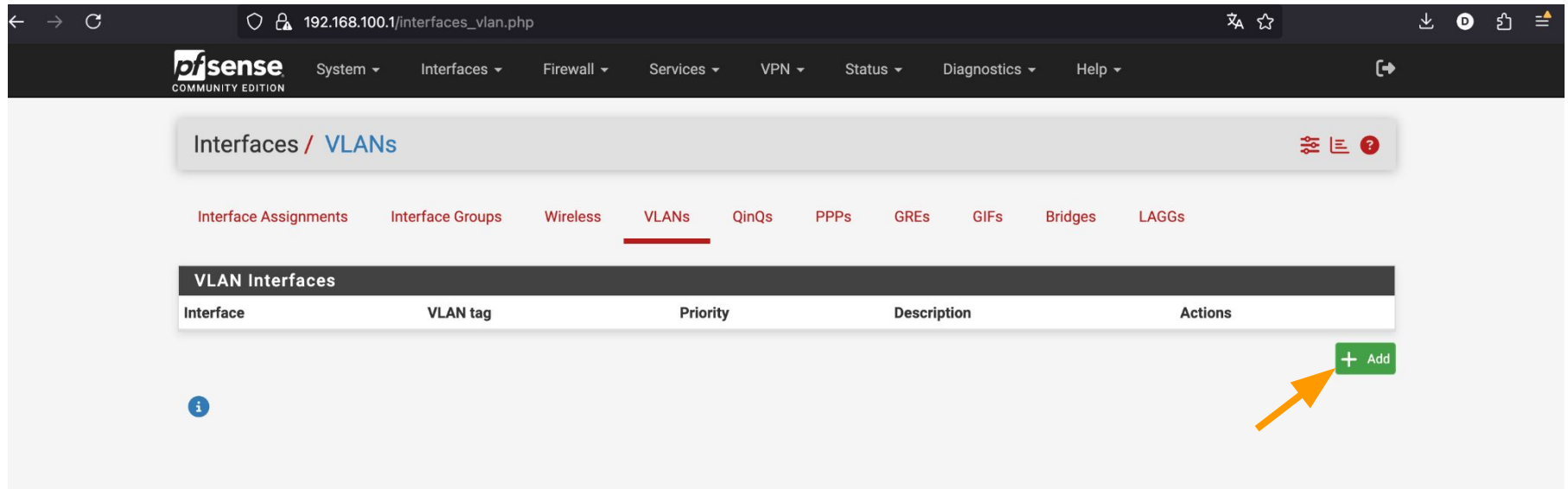
MTU: 1500 VLAN IDs: 2-4094

Advanced ☒ OK

VLANs sur pfSense

Aller sur pfSense → Interfaces → Assignment → VLANs

Cliquer sur Add



The screenshot shows the pfSense web interface. The browser address bar displays `192.168.100.1/interfaces_vlan.php`. The navigation menu includes System, Interfaces, Firewall, Services, VPN, Status, Diagnostics, and Help. The breadcrumb trail is Interfaces / VLANs. Below the breadcrumb, there are tabs for Interface Assignments, Interface Groups, Wireless, VLANs (which is selected and underlined), QinQs, PPPs, GREs, GIFs, Bridges, and LAGGs. The main content area is titled "VLAN Interfaces" and contains a table with the following columns: Interface, VLAN tag, Priority, Description, and Actions. In the bottom right corner of the table, there is a green button with a plus sign and the text "+ Add". An orange arrow points to this button.

Interface	VLAN tag	Priority	Description	Actions
<div>+ Add</div>				

Choisir l'interface parent, définir le tag VLAN, save.

pfSense COMMUNITY EDITIONSystem Interfaces Firewall Services VPN Status Diagnostics Help

Interfaces / VLANs / Edit

VLAN Configuration

Parent Interface

em0 (bc:24:11:81:00:c2) - lan

Only VLAN capable interfaces will be shown.

VLAN Tag

30

802.1Q VLAN tag (between 1 and 4094).

VLAN Priority

0

802.1Q VLAN Priority (between 0 and 7).











Description

Serveurs

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

Save

Liste des VLANs

VLAN Interfaces				
Interface	VLAN tag	Priority	Description	Actions
em0 (lan)	10		Critique	 
em0 (lan)	20		Clients	 
em0 (lan)	30		Serveurs	 
em0 (lan)	40		Developpement	 
em0 (lan)	99		VPN	 

+ Add

Assigner les VLANs dans pfSense

Dans Interfaces →
Assignment, ajouter les
VLANs et configurez-les :

- IP
- DNS
- DHCP
- Règles

Configuration d'une interface VLAN dans pfSense

Activez l'interface
et configurez l'IP

General Configuration

Enable

☒ Enable interface

Description

Enter a description (name) for the interface here.

IPv4 Configuration Type

Static IPv4

IPv6 Configuration Type

None

MAC Address

The MAC address of a VLAN interface must be set on its parent interface

MTU

If this field is blank, the adapter's default MTU will be used. This is typically 1500 bytes but can vary in some circumstances.

MSS

If a value is entered in this field, then MSS clamping for TCP connections to the value entered above minus 40 for IPv4 (TCP/IPv4 header size) and minus 60 for IPv6 (TCP/IPv6 header size) will be in effect.

Speed and Duplex

Explicitly set speed and duplex mode for this interface.
WARNING: MUST be set to autoselect (automatically negotiate speed) unless the port this interface connects to has its speed and duplex forced.

Static IPv4 Configuration

IPv4 Address

/

IPv4 Upstream gateway

[+ Add a new gateway](#)

DHCP d'une interface VLAN



Services → DHCP Server
→ ManagementCritique

Renseigner le pool, les dns
plus bas, etc.

piSense COMMUNITY EDITION System ▾ Interfaces ▾ Firewall ▾ Services ▾ VPN ▾ Status ▾ Diagnostics ▾ Help ▾

Services / DHCP Server / MANAGEMENTCRITIQUE

Settings LAN MANAGEMENTCRITIQUE

General Settings

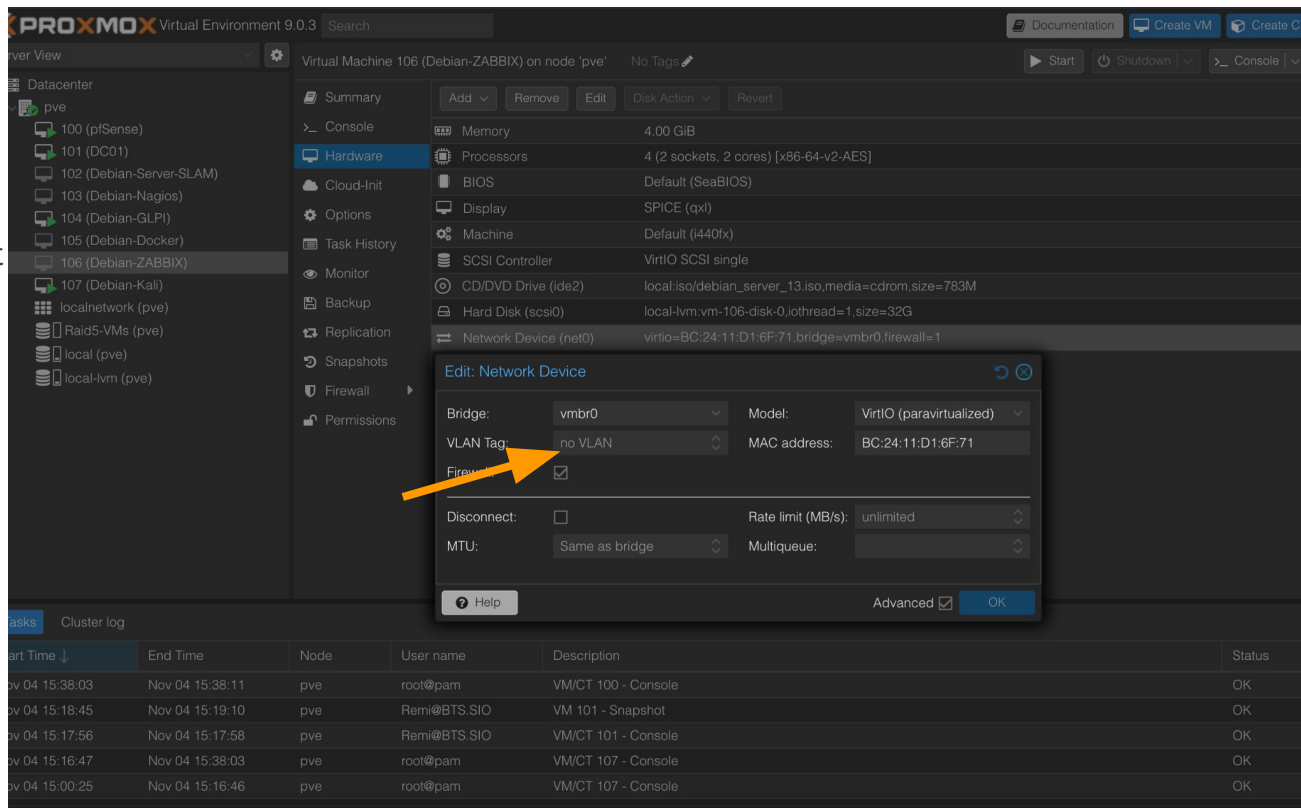
DHCP Backend	Kea DHCP
Enable	<input checked="" type="checkbox"/> Enable DHCP server on MANAGEMENTCRITIQUE interface
Deny Unknown Clients	<div>Allow all clients ▾ <small>When set to Allow all clients, any DHCP client will get an IP address within this scope/range on this interface. If set to Allow known clients from any interface, any DHCP client with a MAC address listed in a static mapping on any scope(s)/interface(s) will get an IP address. If set to Allow known clients from only this interface, only MAC addresses listed in static mappings on this interface will get an IP address within this scope/range.</small></div>
Ignore Client Identifiers	<div><input type="checkbox"/> Do not record a unique identifier (UID) in client lease data if present in the client DHCP request <small>This option may be useful when a client can dual boot using different client identifiers but the same hardware (MAC) address. Note that the resulting server behavior violates the official DHCP specification.</small></div>
DNS Registration	<div>Track server ▾ <small>Optionally overrides the DHCP server default DNS registration policy to force a specific policy.</small></div>
Early DNS Registration	<div>Track server ▾ <small>Optionally overrides the DHCP server default early DNS registration policy to force a specific policy.</small></div>

Primary Address Pool

Subnet	192.168.110.0/24
Subnet Range	192.168.110.1 - 192.168.110.254
Address Pool Range	<div>192.168.110.100 192.168.110.150</div>

Assigner un VLAN à une VM

Ajouter le tag correspondant dans les paramètres de la carte réseau de la VM.



The screenshot shows the Proxmox Virtual Environment 9.0.3 interface. The left sidebar lists various VMs, with '106 (Debian-ZABBIX)' selected. The main panel displays the 'Hardware' tab for this VM. The 'Network Device' (net0) is highlighted, and an 'Edit Network Device' dialog box is open. In this dialog, the 'VLAN Tag' field is set to 'no VLAN', and an orange arrow points to it. Other fields in the dialog include 'Bridge' (vmbr0), 'Model' (VirtIO (paravirtualized)), 'MAC address' (BC:24:11:D1:6F:71), 'Disconnect' (unchecked), 'Rate limit (MB/s)' (unlimited), 'MTU' (Same as bridge), and 'Multiqueue'.

Start Time	End Time	Node	User name	Description	Status
Nov 04 15:38:03	Nov 04 15:38:11	pve	root@pam	VM/CT 100 - Console	OK
Nov 04 15:18:45	Nov 04 15:19:10	pve	Remi@BTS.SIO	VM 101 - Snapshot	OK
Nov 04 15:17:56	Nov 04 15:17:58	pve	Remi@BTS.SIO	VM/CT 101 - Console	OK
Nov 04 15:16:47	Nov 04 15:38:03	pve	root@pam	VM/CT 107 - Console	OK
Nov 04 15:00:25	Nov 04 15:16:46	pve	root@pam	VM/CT 107 - Console	OK




Passerelles

pfSense aura une passerelle dans chaque VLAN, l'IP renseigné dans l'interface directement sur pfSense. Les clients pourront ou non se connecter à l'interface de pfSense via cette IP sauf si une règle restreint cet accès.



Recapitulatif

Priorité 1 au plus critique vers 7 le moins critique

 **pfSense**
COMMUNITY EDITION

System ▾

Interfaces ▾

Firewall ▾




Services ▾

VPN ▾




Status ▾

Diagnostics ▾

Help ▾



Interfaces / VLANs



Interface Assignments

Interface Groups

Wireless

VLANs

QinQs

PPPs











GREs


GIFs


Bridges

LAGGs

VLAN Interfaces

Interface	VLAN tag	Priority	Description	Actions
em0 (lan)	10	1	Management	 
em0 (lan)	20		Clients	 
em0 (lan)	30	2	Serveurs	 
em0 (lan)	40		Developpement	 
em0 (lan)	99		VPN	 



 Add