

Documentation technique

BIOVISION



Créer un système de redondance (DHCP Failover)



Introduction

Dans ce document, vous allez apprendre à mettre en place un système de DHCP Failover (redondance).

1. Prérequis

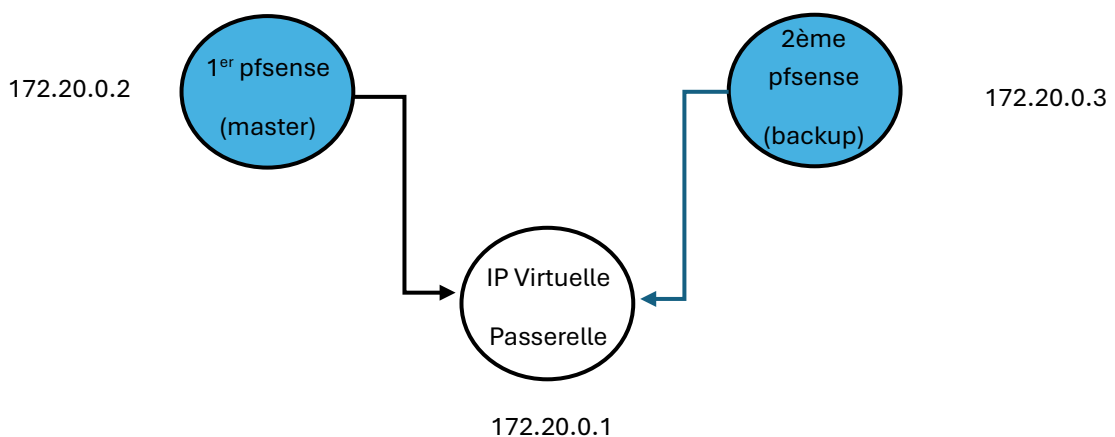
Dans notre exemple, nous aurons besoin :

- 1 machine avec accès avec a un navigateur
- 2 machines avec pfsense

Tableau du réseau

Serveur AD	172.20.0.10
1 ^{er} pfsense (master)	172.20.0.2
2 ^{ème} pfsense (secondaire)	172.20.0.3
IP Virtuelle	172.20.0.1

Schéma :



2. Etapes

1.

Modifiez les IP de vos machines pfsense (pour faire simple : 2 pour le master et 3 pour le backup)

```
VMware Virtual Machine - Netgate Device ID: 0ecb08dc6c9047b9147b
*** Welcome to pfSense 2.6.0-RELEASE (amd64) on pfSense ***

WAN (wan)      -> em0      -> v4/DHCP4: 192.168.240.163/24
LAN (lan)      -> em1      -> v4: 172.20.0.2/24
DMZ (opt1)     -> em2      -> v4: 172.20.3.1/24

0) Logout (SSH only)      9) pfTop
```

master

```
*** Welcome to pfSense 2.6.0-RELEASE (amd64) on pfSense ***

WAN (wan)      -> em0      -> v4/DHCP4: 192.168.240.165/24
LAN (lan)      -> em1      -> v4: 172.20.0.3/24
DMZ (opt1)     -> em2      -> v4: 172.20.3.1/24

0) Logout (SSH only)      9) pfTop
```

Backup

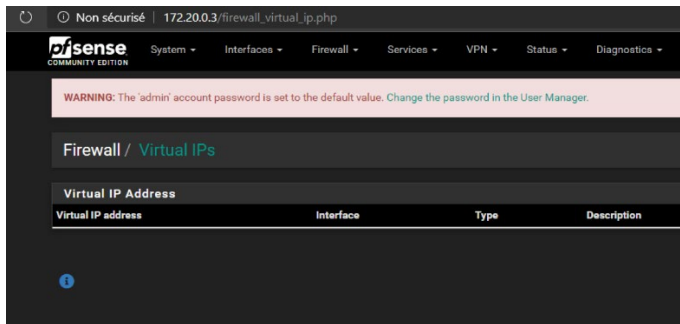
2. Allez dans System > High Availability Sync puis configurer comme ce ci :

The screenshot shows the 'System / High Availability Sync' configuration page. It is divided into several sections:

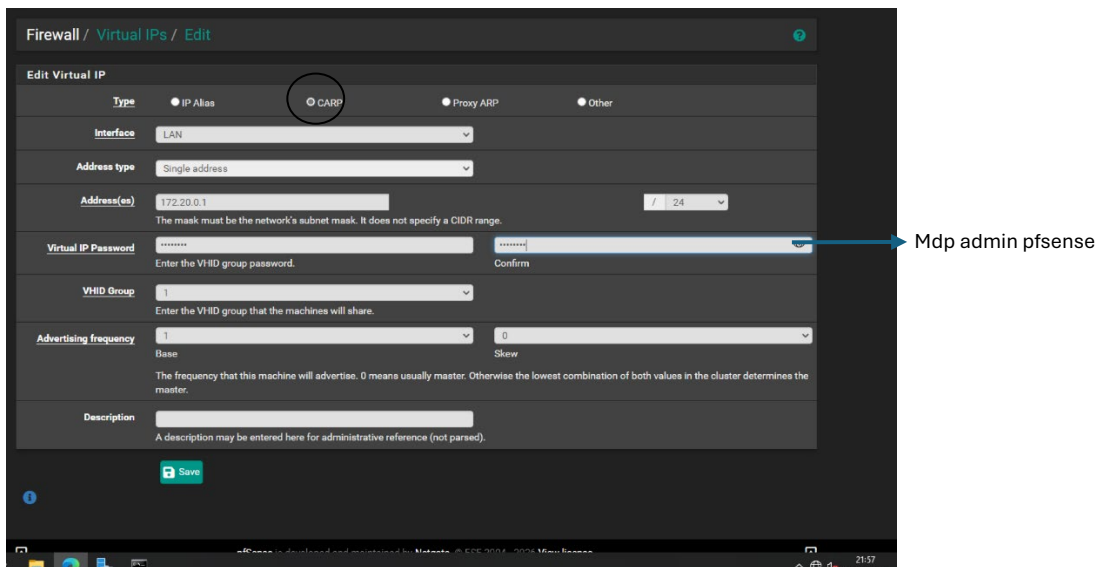
- State Synchronization Settings (pfsync)**
 - Synchronize states:** pfsync transfers state insertion, update, and deletion messages between firewalls. Each firewall sends these messages out via multicast on a specified interface, using the PFSYNC protocol (IP Protocol 240). It also listens on that interface for similar messages from other firewalls, and imports them into the local state table. This setting should be enabled on all members of a failover group. Clicking "Save" will force a configuration sync if it is enabled! (see Configuration Synchronization Settings below)
 - Synchronize Interface:** A dropdown menu is set to 'LAN'. An arrow points to the text 'Interface LAN Principale'.
 - pfsync Synchronize Peer IP:** A text input field contains '172.20.0.3'. An arrow points to the text 'IP Pfsense backup'.
- Configuration Synchronization Settings (XMLRPC Sync)**
 - Synchronize Config to IP:** A text input field contains '172.20.0.3'. An arrow points to the text 'Interface LAN Principale'.
- Remote System Username:** A text input field contains 'admin'.

Et tout cocher (DHCP Server etc...)

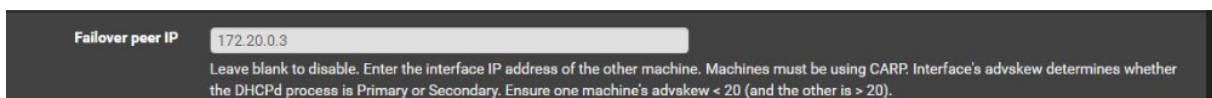
3. Allez dans Firewall > Virtual IP > add



4. Configurez votre virtuelle comme ce ci :



5. Cochez et configurez le failover peer ip sur : DHCP > LAN sur chaque pfSense (donc sur le master « 172.20.0.3 » et sur le backup « 172.20.0.2 »



6. c'est terminé ! Allez dans Status > CARP pour vérifier la configuration.

Non sécurisé | 172.20.0.3/status_carp.php

pfSense COMMUNITY EDITION

System | Interfaces | Firewall | Services | VPN | Status | Diagnostics | Help

Status / CARP

Temporarily Disable CARP | Enter Persistent CARP Maintenance Mode

CARP Interface	Virtual IP	Status
LAN@1	172.20.0.1/24	BACKUP

Non sécurisé | 172.20.0.2/status_carp.php

pfSense COMMUNITY EDITION

System | Interfaces | Firewall | Services | VPN | Status | Diagnostics | Help

Status / CARP

Temporarily Disable CARP | Enter Persistent CARP Maintenance Mode

CARP Interface	Virtual IP	Status
LAN@1	172.20.0.1/24	MASTER