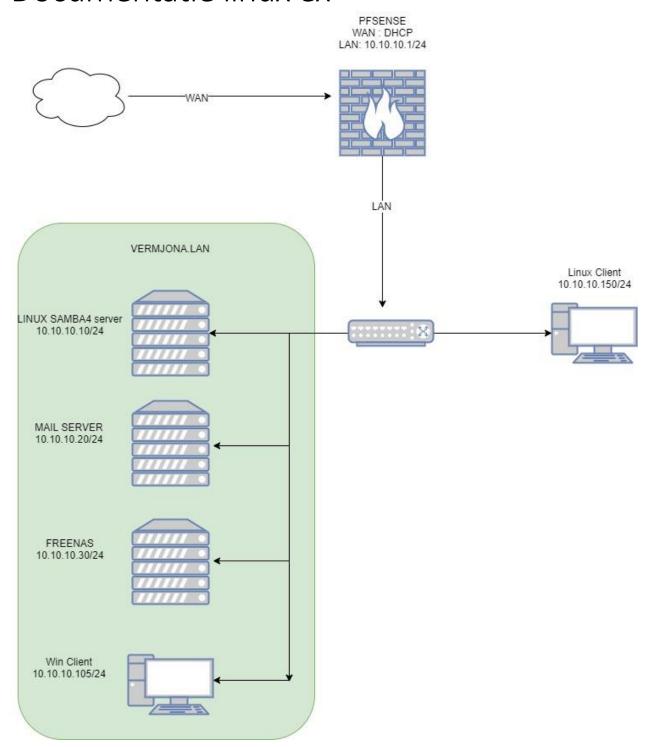
Documentatie linux ex

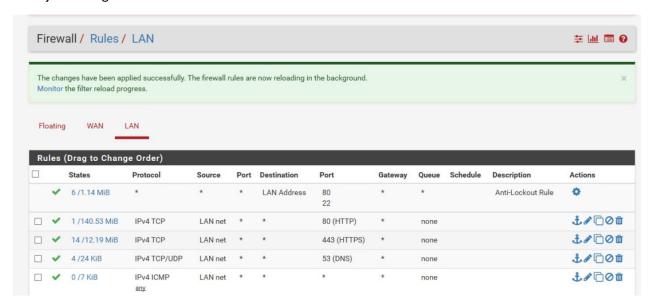


We beginnen met het opzetten van een firewall met 1 lan en 1 wan kant

Deze ziet er als volg uit

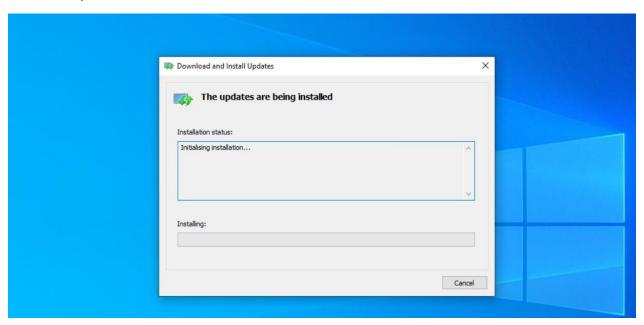
```
Starting syslog...done.
Starting CRON... done.
pfSense 2.4.4-RELEASE amd64 Thu Sep 20 09:03:12 EDT 2018
Bootup complete
FreeBSD/amd64 (pfSense.localdomain) (ttyv0)
UMware Virtual Machine - Netgate Device ID: e90ed8cf94da2aaac2fc
*** Welcome to pfSense 2.4.4-RELEASE (amd64) on pfSense ***
WAN (wan)
                 0xmv <-
                               -> v4/DHCP4: 10.10.50.118/24
LAN (lan)
                 -> VMX1
                               -> v4: 10.10.10.1/24
                                       9) pfTop
0) Logout (SSH only)
 1) Assign Interfaces
                                      10) Filter Logs
2) Set interface(s) IP address
                                      11) Restart webConfigurator
3) Reset webConfigurator password
                                      12) PHP shell + pfSense tools
4) Reset to factory defaults
                                      13) Update from console
5) Reboot system
                                      14) Disable Secure Shell (sshd)
                                      15) Restore recent configuration
6) Halt system
 7) Ping host
                                      16) Restart PHP-FPM
8) Shell
```

Hieronder zie je al de firewall rules maar hiervoor dien je eerst een windows client aan te maken en hem in de juiste range te zetten.



Installeer daarom een windows client met volgende netwerk instellingen

Download op de client ook rsat tools



Als dat gedaan is gaan we over naar het maken van de AD met samba.

Hiervoor hebben we een nieuwe linux machine nodig. Zet deze ook in de range van je Lan net

```
GNU nano 2.9.3
                                        /etc/netplan/50-cloud-init.yaml
                                                                                                   Modified
# This file is generated from information provided by
# the datasource. Changes to it will not persist across an instance.
# To disable cloud-init's network configuration capabilities, write a file
# /etc/cloud/cloud.cfg.d/99-disable-network-config.cfg with the following:
# network: {config: disabled}
network:
    ethernets:
        ens160:
             addresses: [10.10.10.10/24]
             gateway4: 10.10.10.1
             dhcp4: no
             nameservers:
             addresses: [8.8.8.8,8.8.4.4]
optional: true
    version: 2
```

Ctrl + X en typ y

Sudo netplan apply

Sudo reboot

Sudo dpkg-reconfigure tzdata -> Europe -> brussels

Sudo hostnamectl set-hostname adc1.vermjona.lan

Sudo apt -y update && sudo apt -y upgrade

Sudo apt -y install samba krb5-config winbind smbclient

VERMJONA.LAN

Adc1.vermjona.lan

Adc1.vermjona.lan

Sudo nano /etc/hosts

```
GNU nano 2.9.3 /etc/hosts

127.0.0.1 localhost
10.10.10.10 adc1.vermjona.lan adc1

# The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
```

Cd /etc/samba

Sudo mv smb.conf smb.conf.bak

Sudo samba-tool domain provision

ENTER

ENTER

ENTER

ENTER

Kies bij dns forwarder het ip van de DG

Kies een sterk wachtwoord

sudo cp /var/lib/samba/private/krb5.conf /etc/ sudo systemctl disable --now smbd nmbd winbind systemd-resolved sudo systemctl unmask samba-ad-dc.service sudo systemctl enable --now samba-ad-dc.service sudo samba-tool domain level show

sudo rm /etc/resolv.conf sudo nano /etc/resolv.conf nameserver 127.0.0.1 search vermjona.lan

ZET PASSWORD COMPLEXITY AF

sudo samba-tool user add jonas sudo samba-tool group addmembers "Domain Admins" jonas sudo samba-tool domain passwordsettings set --complexity=off sudo samba-tool domain passwordsettings set --history-length=0 sudo samba-tool domain passwordsettings set --max-pwd-age=0 sudo samba-tool domain passwordsettings set --min-pwd-age=0 sudo samba-tool domain passwordsettings set --min-pwd-length=4 sudo nano /etc/samba/smb.conf Voeg toe:

```
# Global parameters
[global]

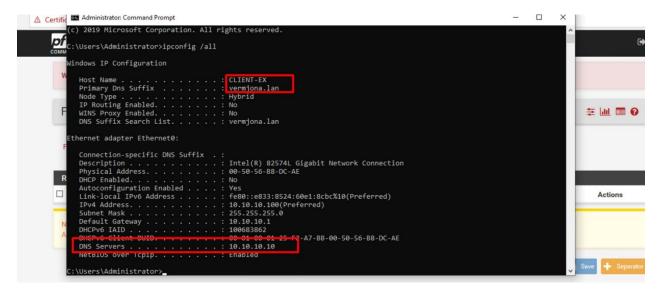
dns forwarder = 10.10.10.1
netbios name = ADC1
realm = VERMJONA.LAN
server role = active directory domain controller
workgroup = NGEMJONA

ldap server require strong auth = 0

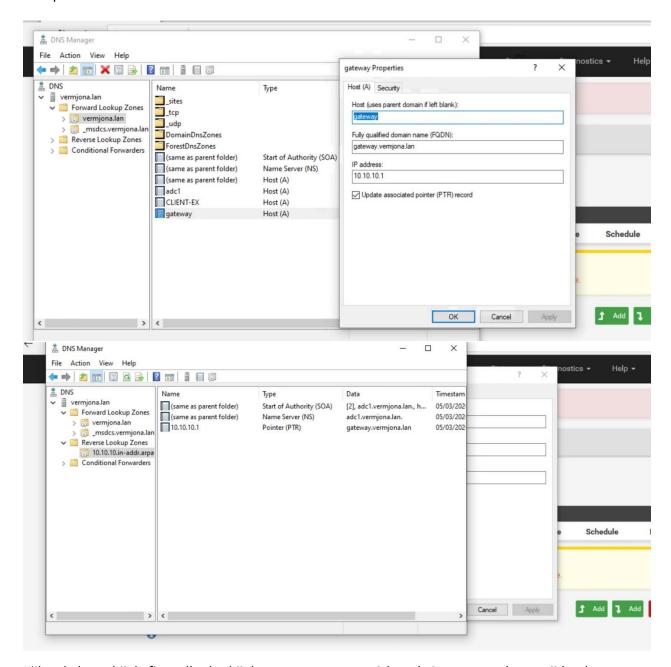
[netlogon]
path = /var/lib/samba/sysvol/vermjona.lan/scripts
read only = No

[sysvol]
path = /var/lib/samba/sysvol
read only = No
```

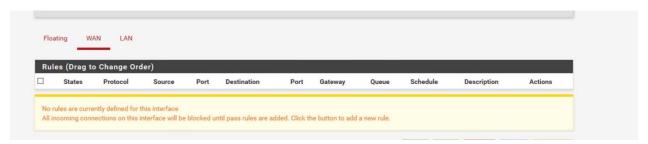
Nu zetten we de client in het domain



Nu gaan we dns instellen op de clien met behulp van rsat tools (forward & reverse zone's)



Kijk ook dat er bij de firewall rules bij de wan geen automatiche rule is aangemaakt verwijder deze anders



Op de AD server : sudo apt intall ntp -> dit is later voor de fileserver!

Mailserver

Zet een nieuwe ubuntu server op clean install en zet deze in je netwerk

```
jonas@mail:~$ cat /etc/netplan/50-cloud-init.yaml
# This file is generated from information provided by
# the datasource. Changes to it will not persist across an instance.
# To disable cloud-init's network configuration capabilities, write a file
# /etc/cloud/cloud.cfg.d/99-disable-network-config.cfg with the following:
# network: {config: disabled}
network:
   ethernets:
        ens160:
            addresses:
            - 10.10.10.20/24
            gateway4: 10.10.10.1
            nameservers:
                addresses:
                - 10.10.10.10
    version: 2
jonas@mail:~$ ~
```

Sudo netplan apply

sudo hostnamectl set-hostname mail.vermjona.lan

Sudo apt -y update && sudo apt -y upgrade

Zorg dat /etc/hosts er als volgende uit ziet

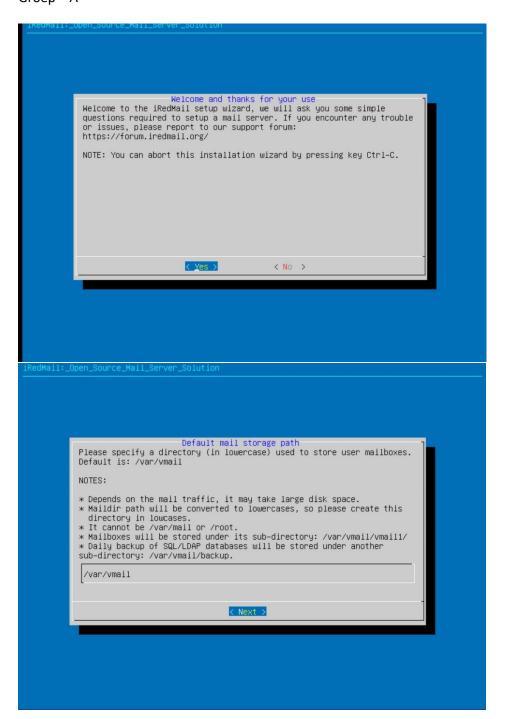
Wget https://github.com/iredmail/iRedMail/archive/1.1.tar.gz

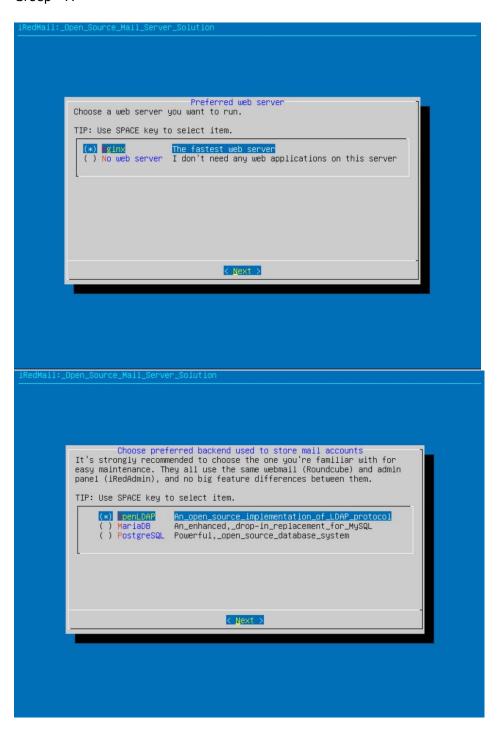
Tar xzvf 1.1.tar.gz

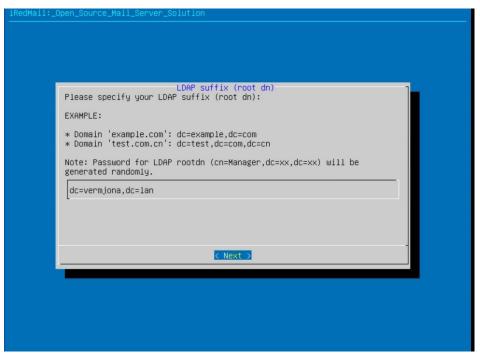
Cd iRedMail-1.1

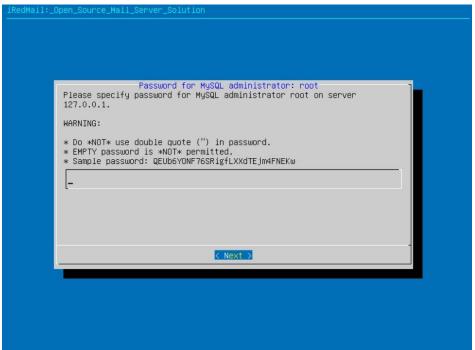
Sudo bash iRedMail.sh

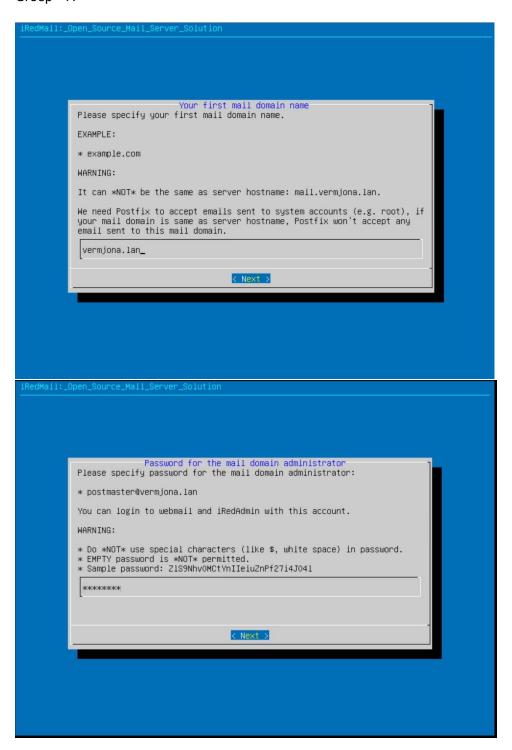
Volg onderstaande screens

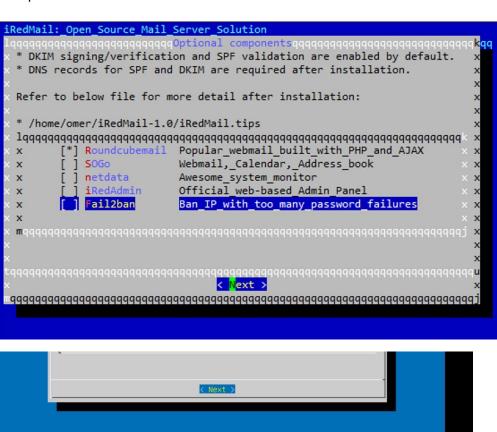


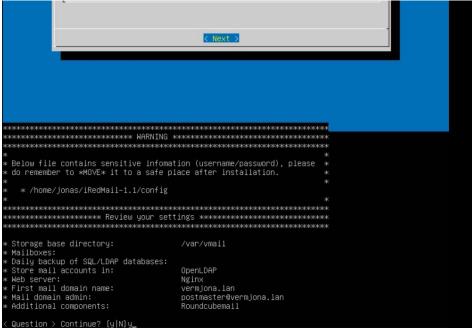








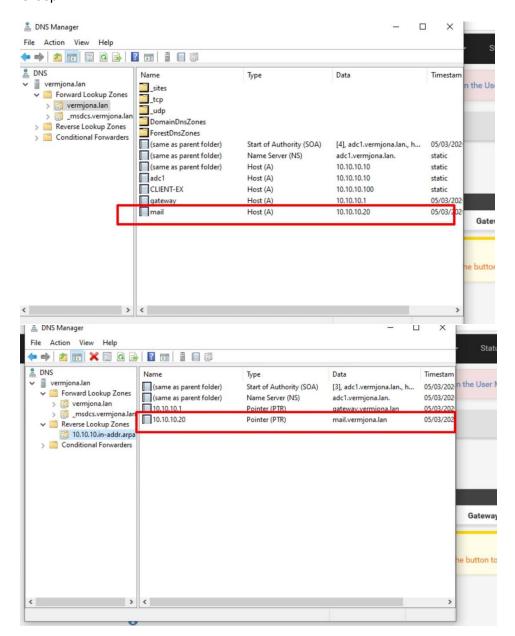




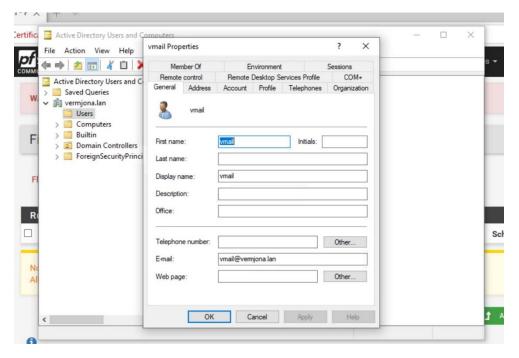
De installatie van iRedmail is klaar

Mail met AD

Maak een dns zone aan voor mail



Maak ook een nieuwe user vmail aan



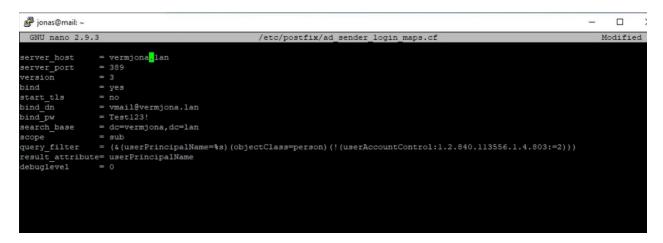
Als dat gedaan is reboot voor de zekerheid je mailserver

Sudo reboot

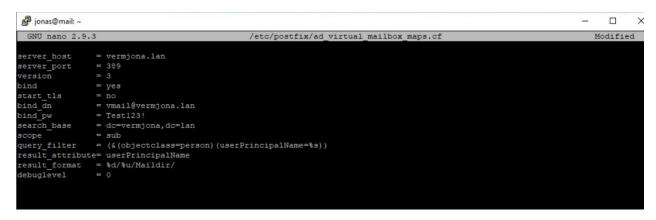
Voer volgende commando's als root uit

```
root@mail: /home/jonas
                                                                               X
root@mail:/home/jonas# postconf -e virtual alias maps=
root@mail:/home/jonas# postconf -e sender bcc maps=' '
root@mail:/home/jonas# postconf -e recipient_bcc_maps='
root@mail:/home/jonas# postconf -e relay_domains=' '
root@mail:/home/jonas# postconf -e relay_recipient_maps=' '
root@mail:/home/jonas# postconf -e sender_dependent_relayhost_maps=' '
root@mail:/home/jonas# postconf -e smtpd sasl local domain='vermjona.lan'
root@mail:/home/jonas# postconf -e virtual_mailbox_domains='vermjona.lan'
root@mail:/home/jonas# postconf -e transport_maps='hash:/etc/postfix/transport'
root@mail:/home/jonas# postconf -e smtpd_sender_login_maps='proxy:ldap:/etc/postfix/ad_sender_log
root@mail:/home/jonas# echo "vermjona.lan dovecot" > /etc/postfix/transport
root@mail:/home/jonas# cat /etc/postfix/transport
vermjona.lan dovecot
root@mail:/home/jonas# postmap hash:/etc/postfix/transport
root@mail:/home/jonas#
```

sudo nano /etc/postfix/ad_sender_login_maps.cf



sudo nano /etc/postfix/ad_virtual_mailbox_maps.cf



sudo nano /etc/postfix/ad_virtual_group_maps.cf

```
GNU nano 2.9.3 /etc/postfix/ad_virtual_group_maps.cf Modified

server_host = vermjona.lan
server_port = 389
version = 3
bind = yes
start_tls = no
bind_dn = vmail@vermjona.lan
bind_pw = Testl23!
search_base = dc=vermjona,dc=lan
scope = sub
query_filter = (&(objectClass=group) (mail=%s))
special_result_attribute = member
leaf_result_attribute = mail
result_attribute = userPrincipalName
debuglevel = 0
```

Sudo nano /etc/postfix/main.cf

Command out de onderstaande regels

sudo rm /etc/dovecot/dovecot-ldap.conf sudo nano /etc/dovecot/dovecot-ldap.conf



sudo systemctl restart postfix dovecot sudo systemctl status postfix dovecot

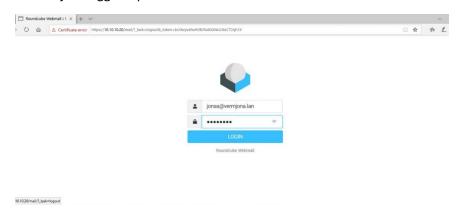
sudo rm /etc/resolv.conf

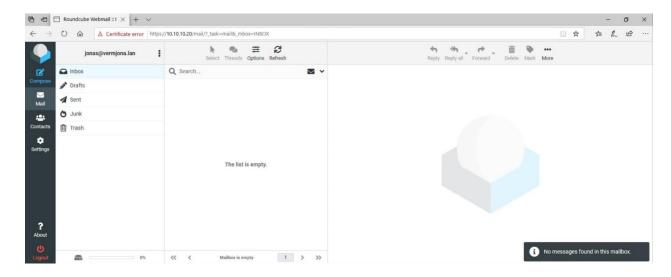
sudo nano /etc/resolv.conf

search vermjona.lan

nameserver 10.10.10.10

Nu kan je inloggen op roundcube





Nu nog de relay host aanpassen zodat we mails naar buiten kunnen sturen

Ga naar je mailserver →

Sudo nano /etc/postfix/main.cf

En navigeer naar: "smtpd_sasl_auth_enable"

En verander deze file zoals volgende screenshot

```
# Do not set virtual_alias_domains.
virtual_alias_domains =

# # Enable SASL authentication on port 25 and force TLS-encrypted SASL authentication.
# # # Enable SASL authentication on port 25 and force TLS-encrypted SASL authentication.
# # # Benable SASL authentication on port 25, all end users should
# be forced to submit email through port 587 instead.
# relayhost = [mail1.fluviusnet.be]:25
smtpd_sasl_password_maps = hash:/etc/postfix/sasl_password
smtpd_sasl_password_maps = hash:/etc/postfix/sasl_password
smtpd_sasl_acturity_options = noanonymous
smtpd_tls_auth_enable = yes
smtpd_sasl_security_options = noanonymous
smtpd_tls_auth_enable = yes
# hostname
myhostname = mail.vermjona.lan
mydomain = mail.vermjona.lan
mydomain = mail.vermjona.lan
# trusted SMTP clients which are allowed to relay mail through Postfix.
# # Note: additional IP addresses/networks listed in mynetworks should be listed
# in iRedAPD setting 'MYNETMORKS' (in '/opt/iredapd/settings.py') too.
# for example:
# MYNETWORKS = ['xx.xx.xx.xx', 'xx.xx.xx.0/24', ...]
# mynetworks = 127.0.0.1 [::1]
# Accepted local emails
mydestination = $myhostname, localhost, localhost.localdomain
```

Sudo nano /etc/postfix/sasl_password

En zit dit in de file → [mail1.fluviusnet.be] user:password

```
jonas@mail:~$ cat /etc/postfix/sasl_password
[mail1.fluviusnet.be] user:password
jonas@mail:~$ _
```

Sudo postmap hash:/etc/postfix/sasl_password

Sudo service postfix restart

Fileserver

Maak een nieuwe vm aan met Freenas ->freebsd

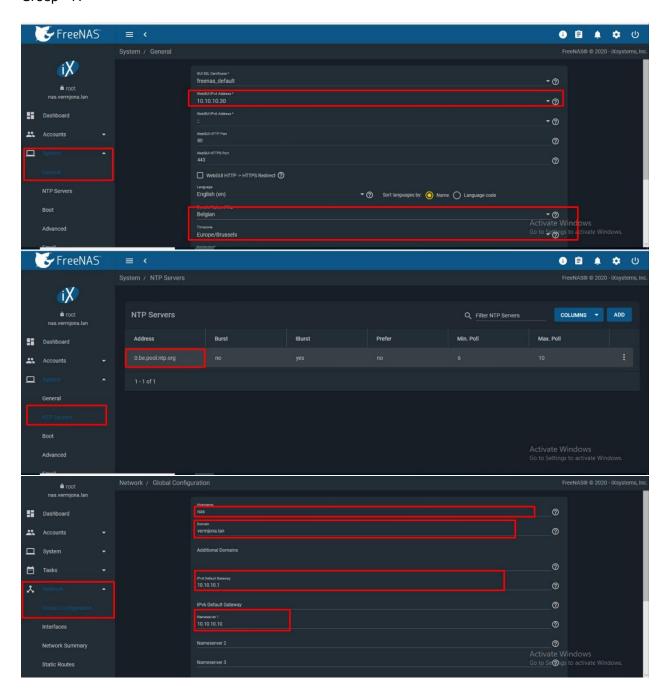
Doe een basis install en zet dan alle netwerkinstelling juist

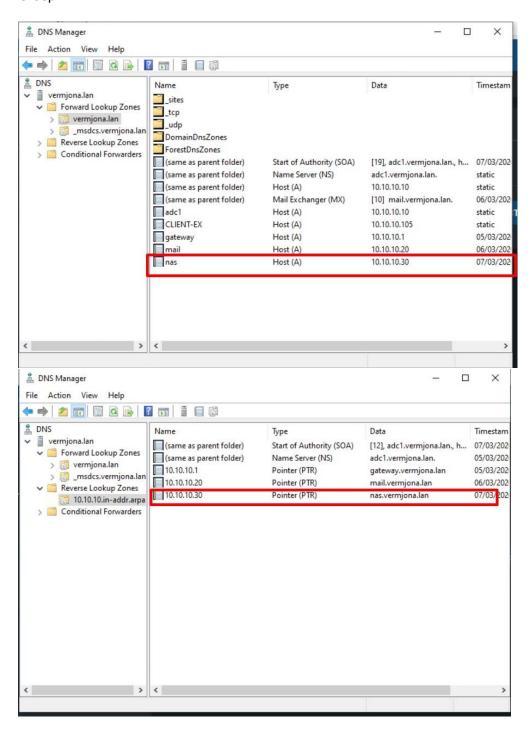
```
FreeBSD/amd64 (nas.vermjona.lan) (ttyv0)
Console setup
1) Configure Network Interfaces
Configure Link Aggregation
3) Configure VLAN Interface
4) Configure Default Route
5) Configure Static Routes
6) Configure DNS
7) Reset Root Password
8) Reset Configuration to Defaults
9) Shell
10) Reboot
11) Shut Down
The web user interface is at:
http://10.10.10.30
https://10.10.10.30
Enter an option from 1-11:
```

Open op je client nu de freenas en login

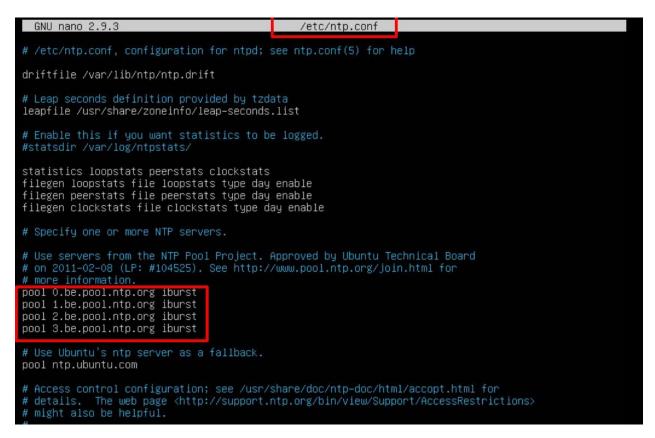


Volg onderstaande screenshots om de instellingen juist te zetten en het domain te joinen



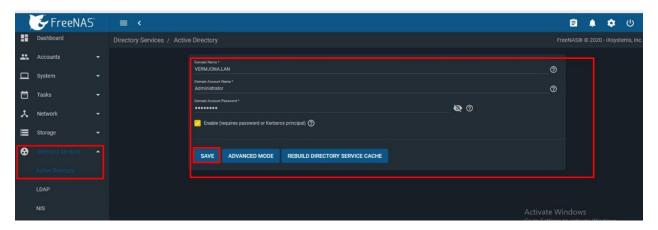


Pas op je AD nu de ntp settings aan



Sudo service ntp reload

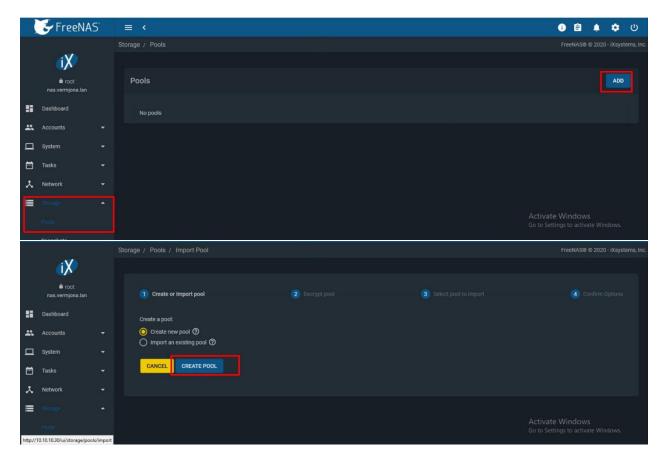
Nu terug naar de webGUI



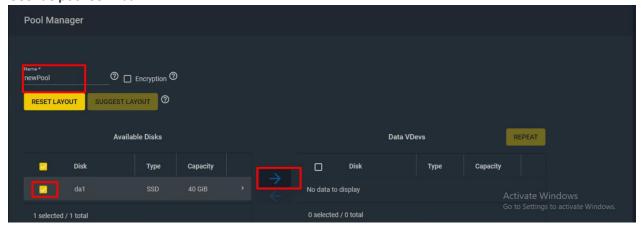
En login met je Administrator account

Nu je NAS gekoppeld is aan je domain gaan we gedeelde mappen aanmaken.

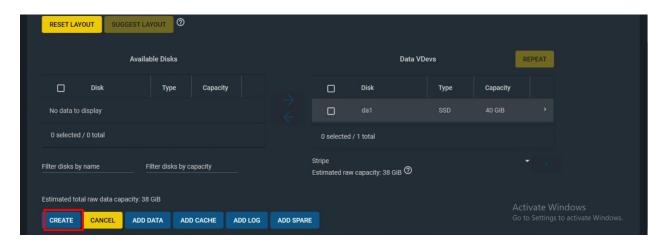
Eerst maken we een nieuwe data set aan

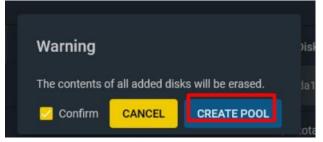


Geef de pool een naam

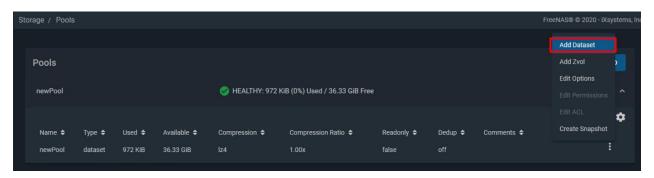


Selecteer de disk waar je de mappen op wilt aanmaken

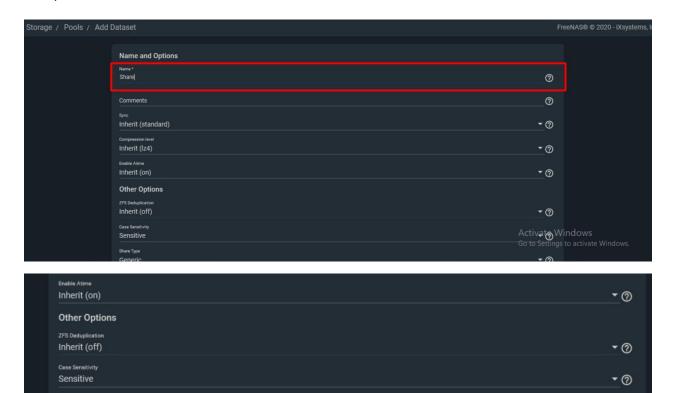




Voeg nu een dataset toe



Geef de dataset een naam en save



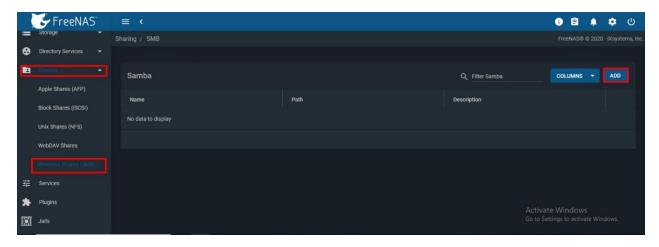
Nu maken we een nieuwe share aan

CANCEL

ADVANCED MODE

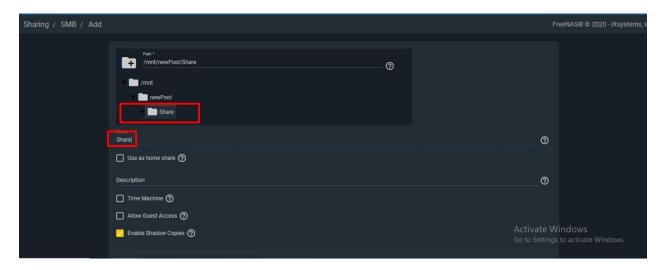
Generic

SAVE

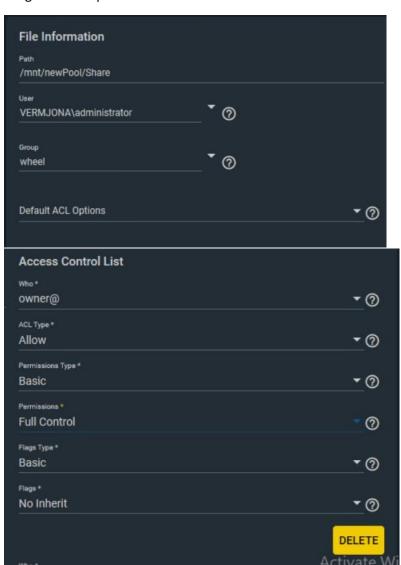


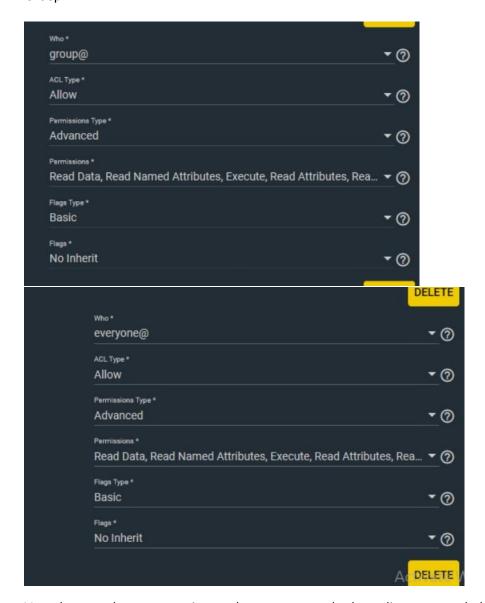
Kies de dataset die we zojuist hebben aangemaakt, en geef deze terug een naam

▼ ②

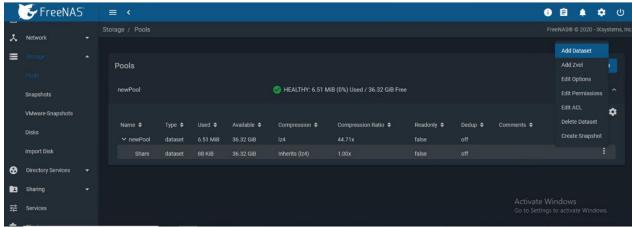


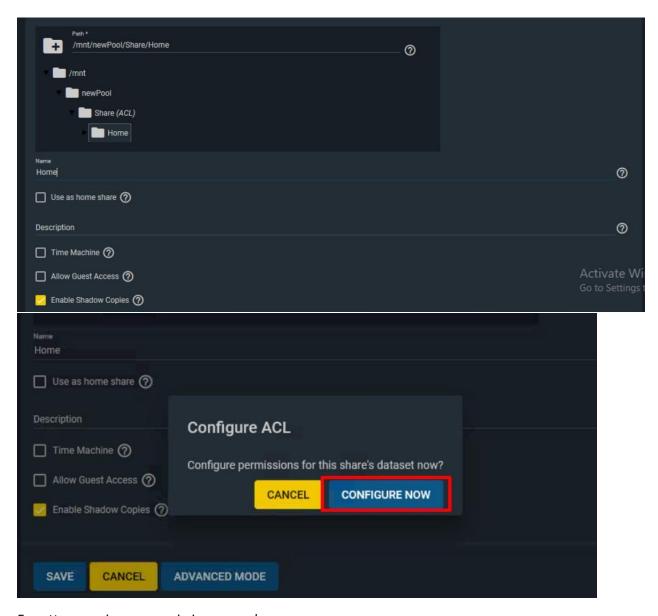
No gaan we de permissions instellen



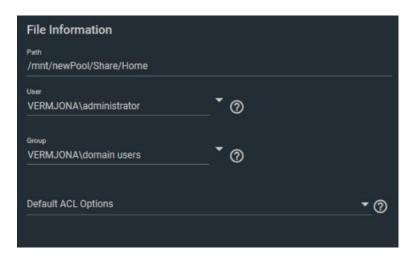


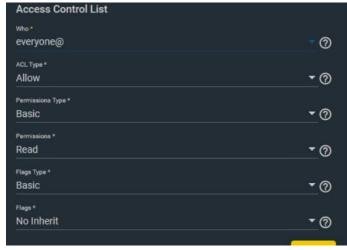
Vervolgens maken we een nieuwe dataset aan om de share die we gemaakt hebben

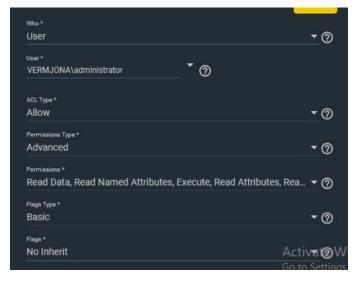


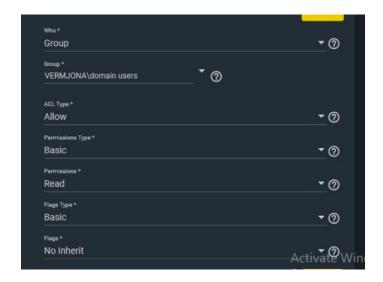


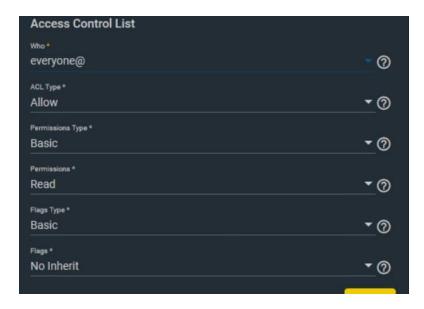
En zetten we nieuwe permissions voor deze map











En save deze settings

Zet nu networksharing aan op je client

