PROJET REV

AISSA Fayçal

partie 1 :

sur sw1 :

a/ pour le nommer

```
/ # Cli
SW1>en
SW1#conf t
SW1(config)#hostname SW1
```

b/ pour creer les vlan :

```
SW1(config)#vlan 100
SW1(config-vlan-100)#
SW1(config-vlan-100)#
SW1(config-vlan-100)#
SW1(config-vlan-100)#name COMMERCIAL
SW1(config-vlan-100)#ex
SW1(config)#vlan 200
SW1(config-vlan-200)#  name ADMINISTRATIF
SW1(config-vlan-200)#
SW1(config-vlan-200)#  name ADMINISTRATIF
SW1(config-vlan-200)#ex
SW1(config)#vlan 300
SW1(config-vlan-300)#name PRODUCTION
```

c/d/ pour leur assigner des port au vlan :

```
SW1(config)#interface ethernet 1-4
SW1(config-if-Et1-4)#switchport mode acces
SW1(config-if-Et1-4)#switchport acces vlan 100
SW1(config-if-Et1-4)#ex
SW1(config)#interface ethernet 5-8
SW1(config-if-Et5-8)#switchport mode acces
SW1(config-if-Et5-8)#switchport acces vlan 200
SW1(config-if-Et5-8)#ex
SW1(config)#interface ethernet 9-12
SW1(config-if-Et9-12)#switchport mode acces
SW1(config-if-Et9-12)#switchport acces vlan 300
SW1(config-if-Et9-12)#ex
SW1(config)#interface ethernet 13-16
SW1(config-if-Et13-16)#switchport mode trunk
SW1(config-if-Et13-16)#switchport trunk allowed vlan 100,200,300
```

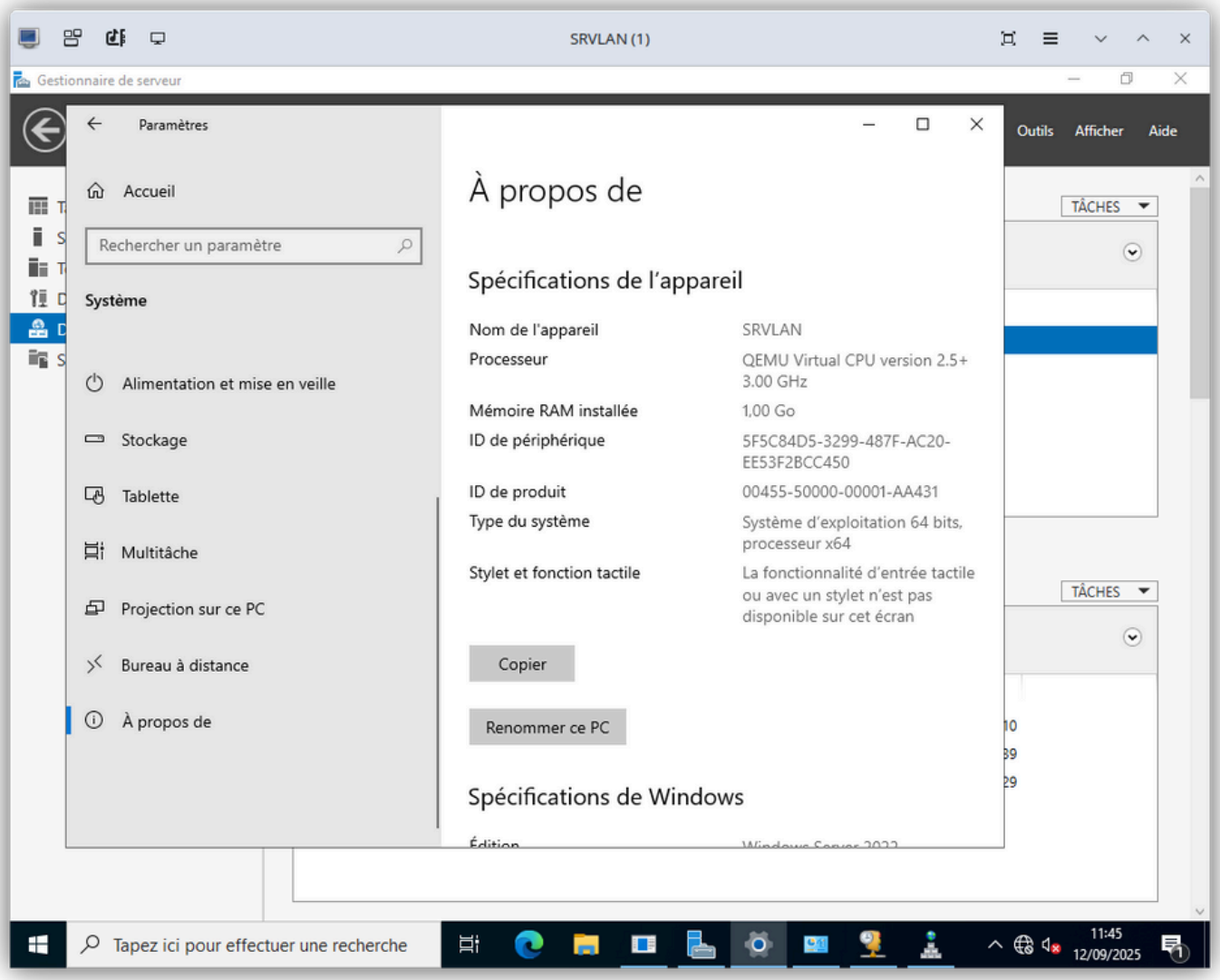
la meme chose pour sw2 :

```
SW2(config)#sh vlan
VLAN  Name                             Status    Ports
----- -------------------------------- --------- -------------------------------
1     default                          active
100   COMMERCIAL                       active    Et1, Et2, Et3, Et4, Et13, Et14
                                                 Et15, Et16
200   ADMINISTRATIF                    active    Et5, Et6, Et7, Et8, Et13, Et14
                                                 Et15, Et16
300   PRODUCTION                       active    Et9, Et10, Et11, Et12, Et13
                                                 Et14, Et15, Et16
```

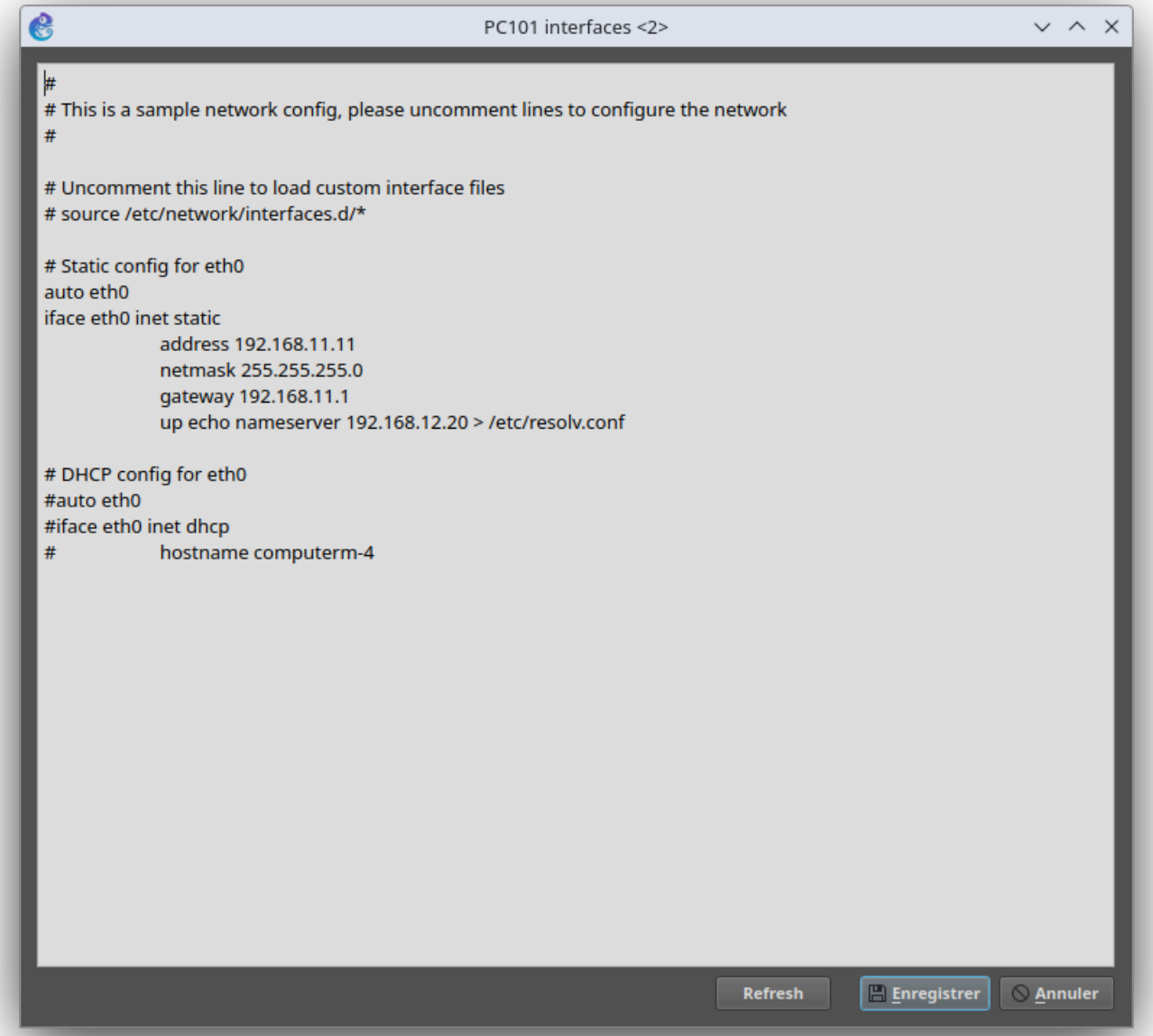
partie 2 :

etape 1 :

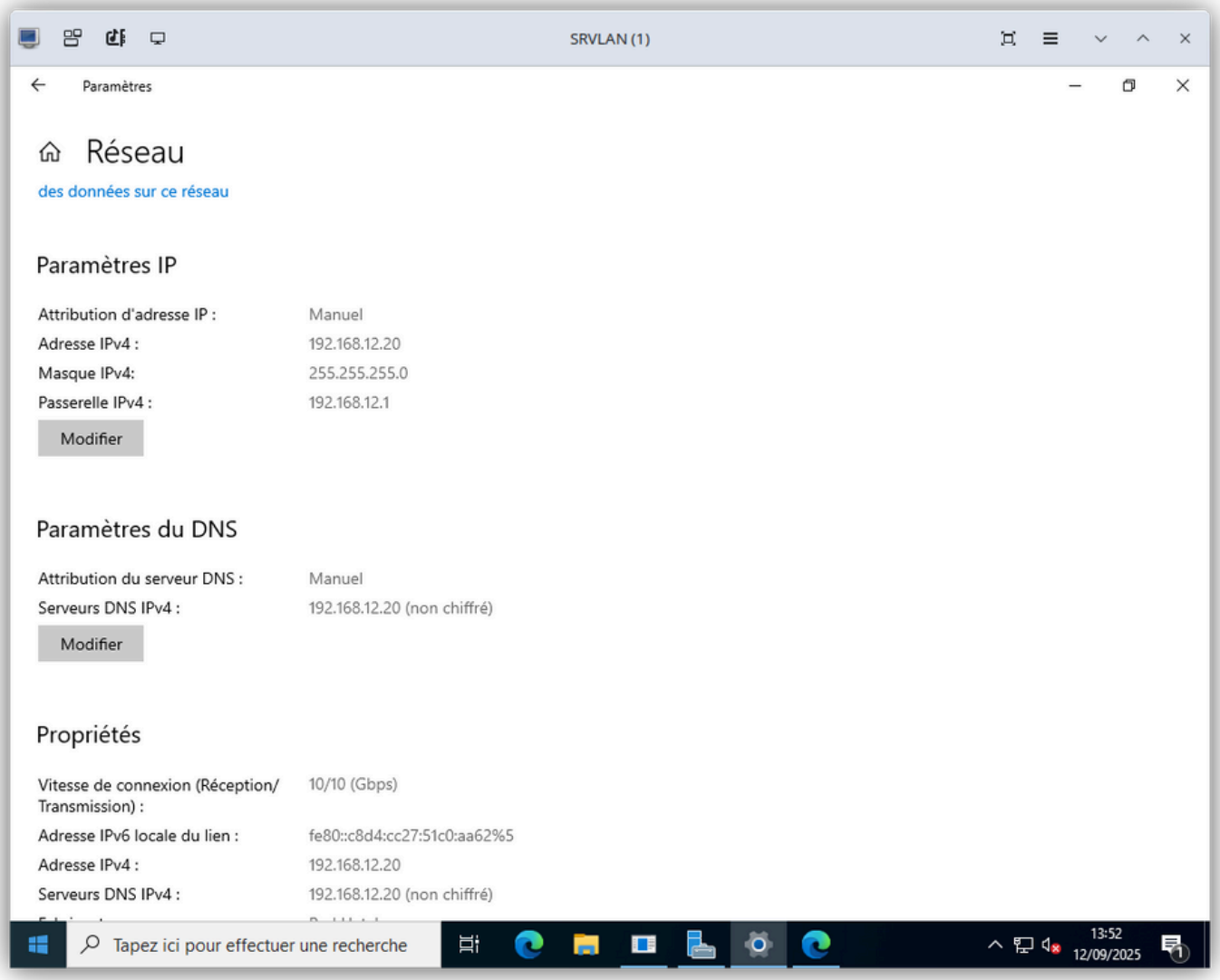
a/



b/ pour les pc j'ai edit config

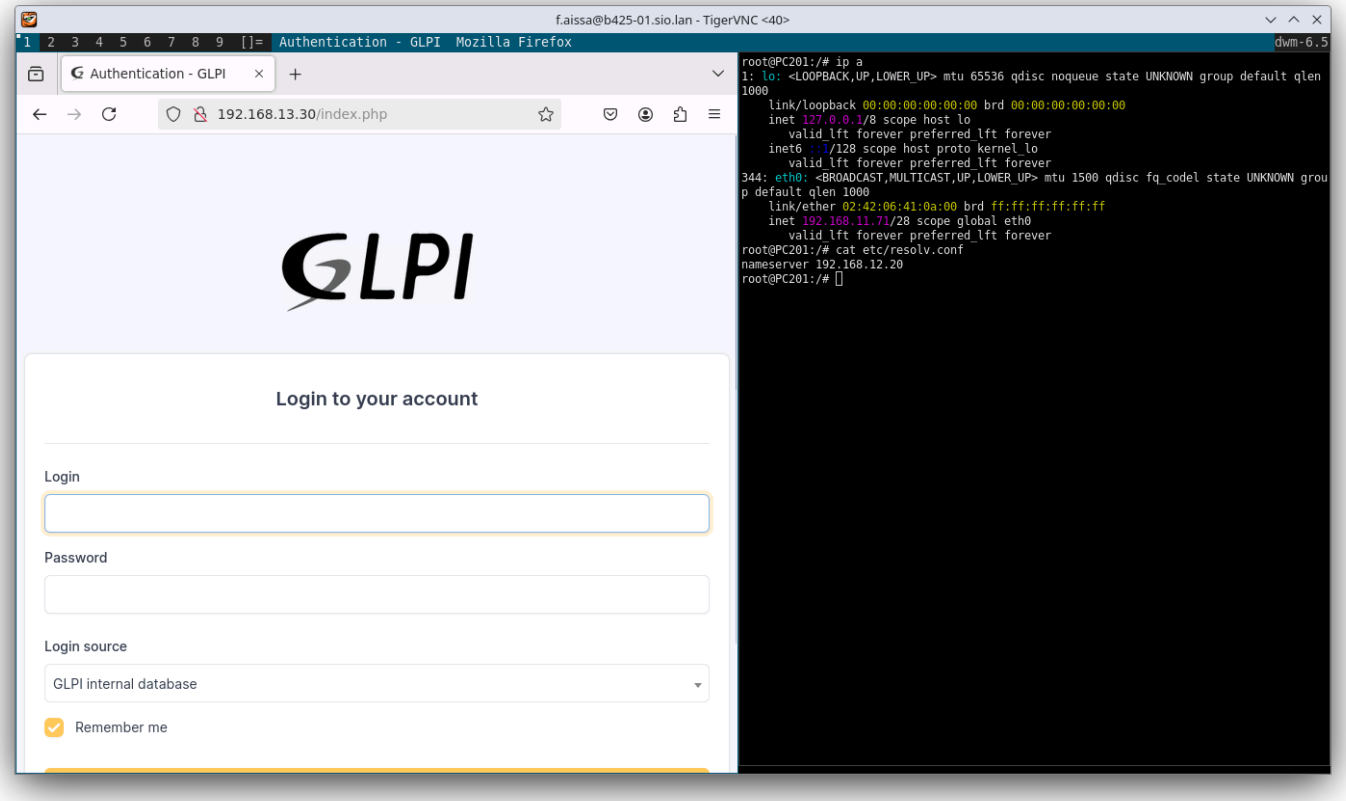

PC101 interfaces <2>
#
This is a sample network config, please uncomment lines to configure the network
#
Uncomment this line to load custom interface files
source /etc/network/interfaces.d/*
Static config for eth0
auto eth0
iface eth0 inet static
address 192.168.11.11
netmask 255.255.255.0
gateway 192.168.11.1
up echo nameserver 192.168.12.20 > /etc/resolv.conf
DHCP config for eth0
#auto eth0
#iface eth0 inet dhcp
hostname computerm-4
Refresh
Enregistrer
Annuler

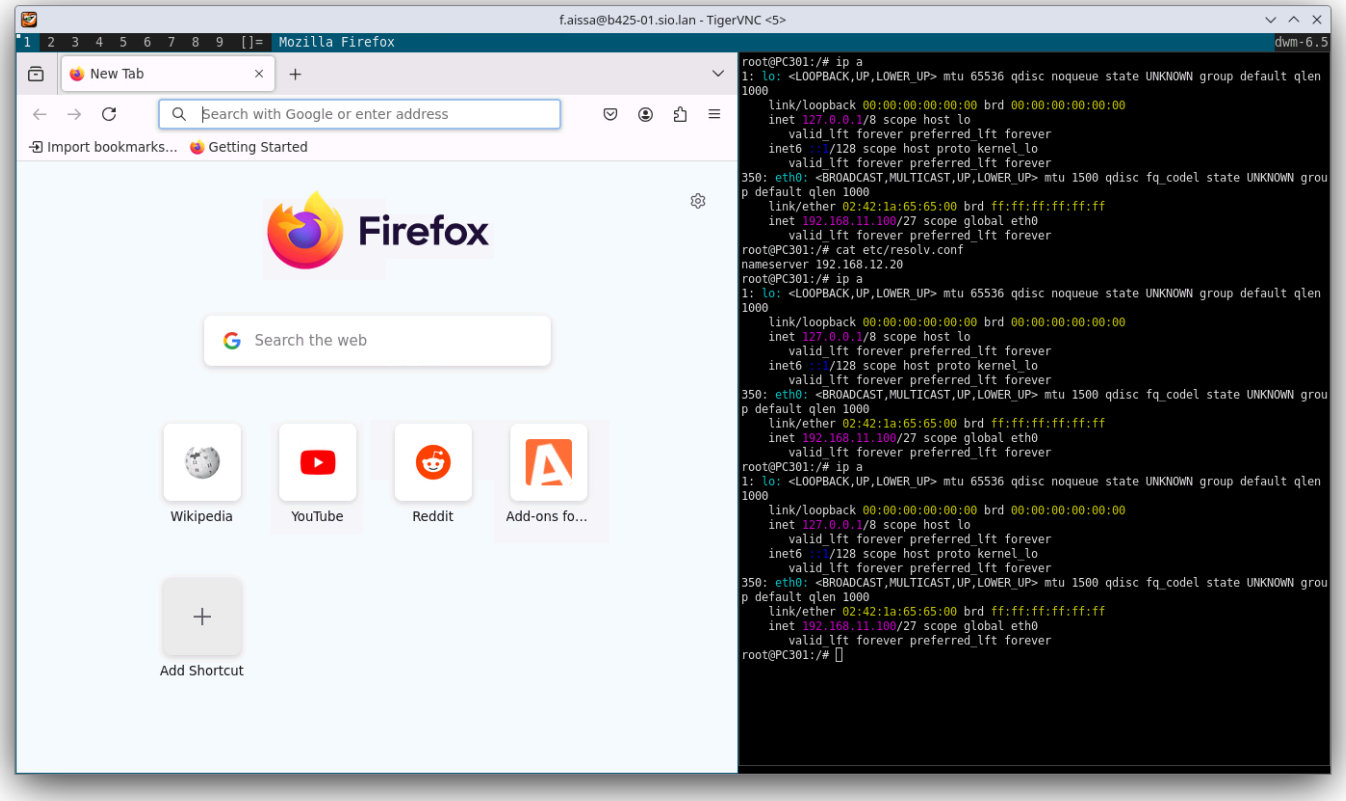
srvlan :



c/

vlan 200 et 300 recupere leur ip en dhcp



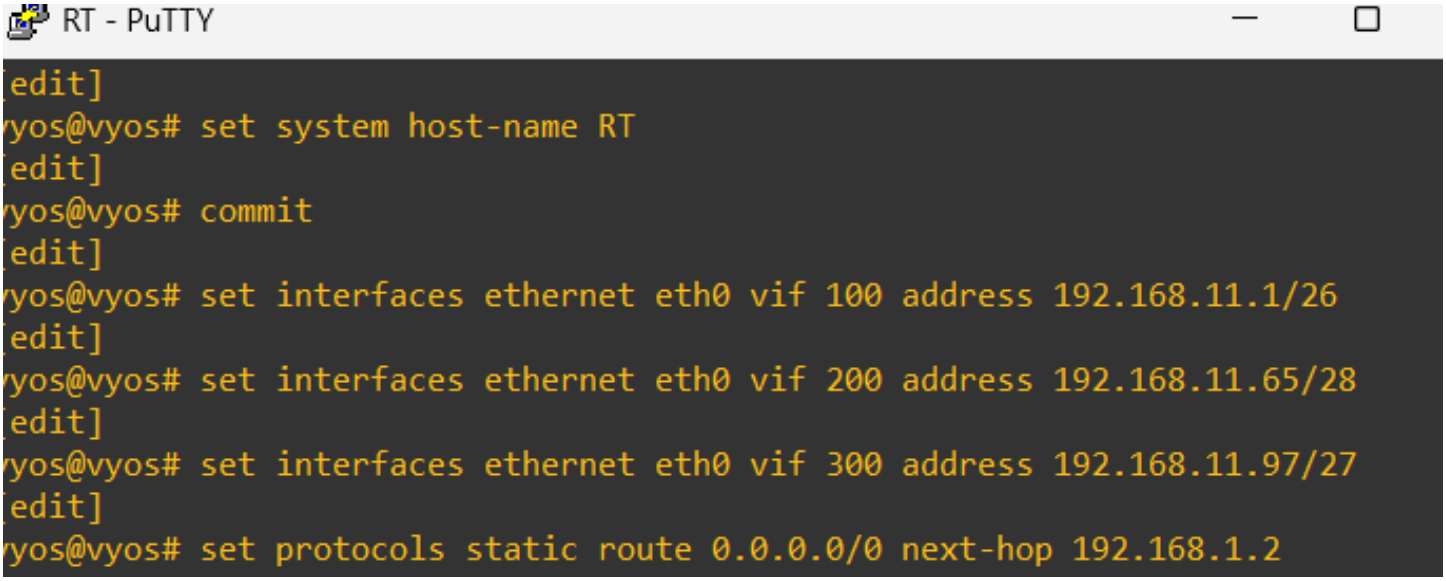


etape 2 :

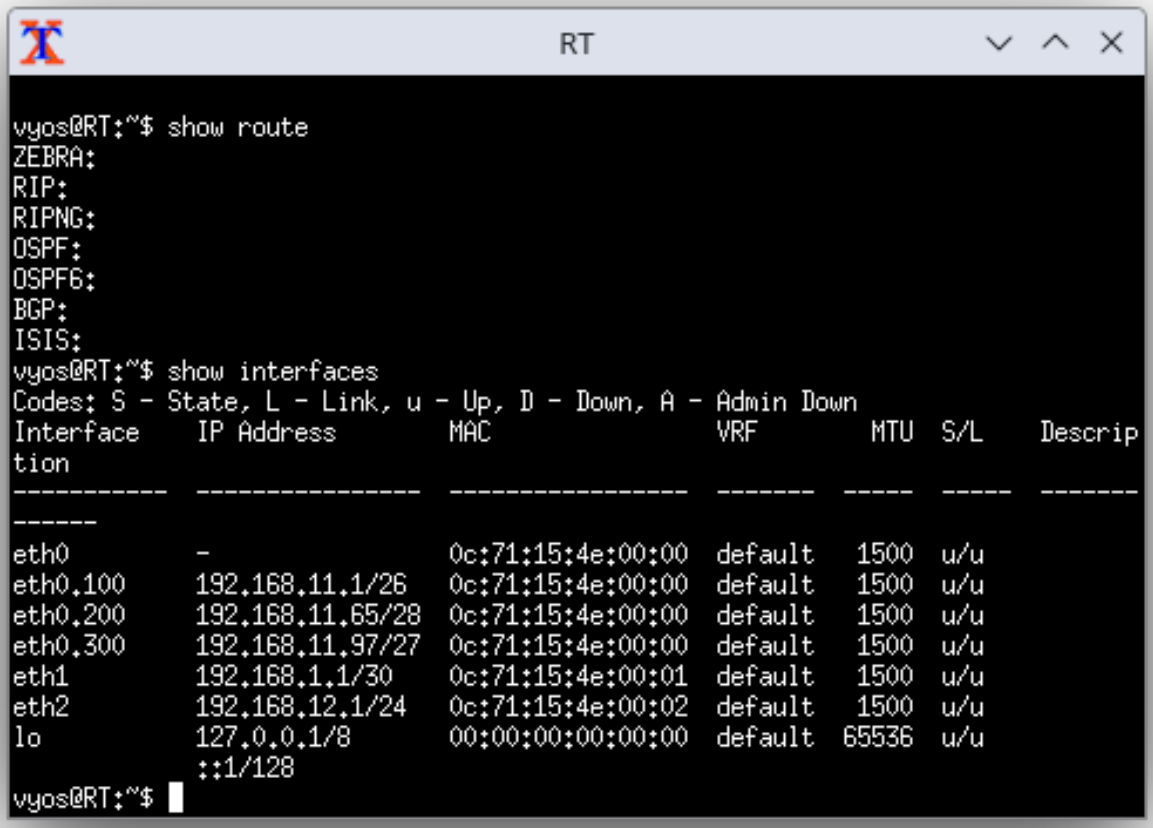
pour nommer le routeur

set system host-name RT

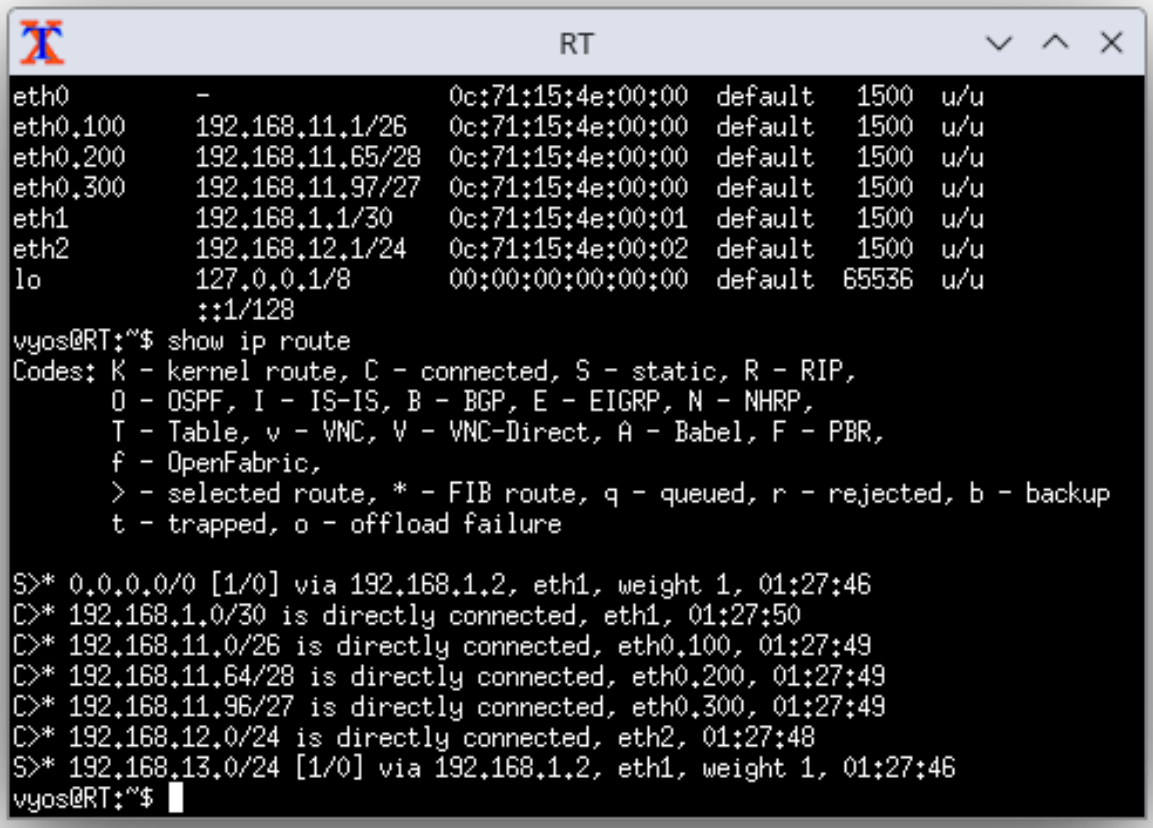
config les interfaces route :



set interfaces ethernet eth2 address 192.168.12.1/24

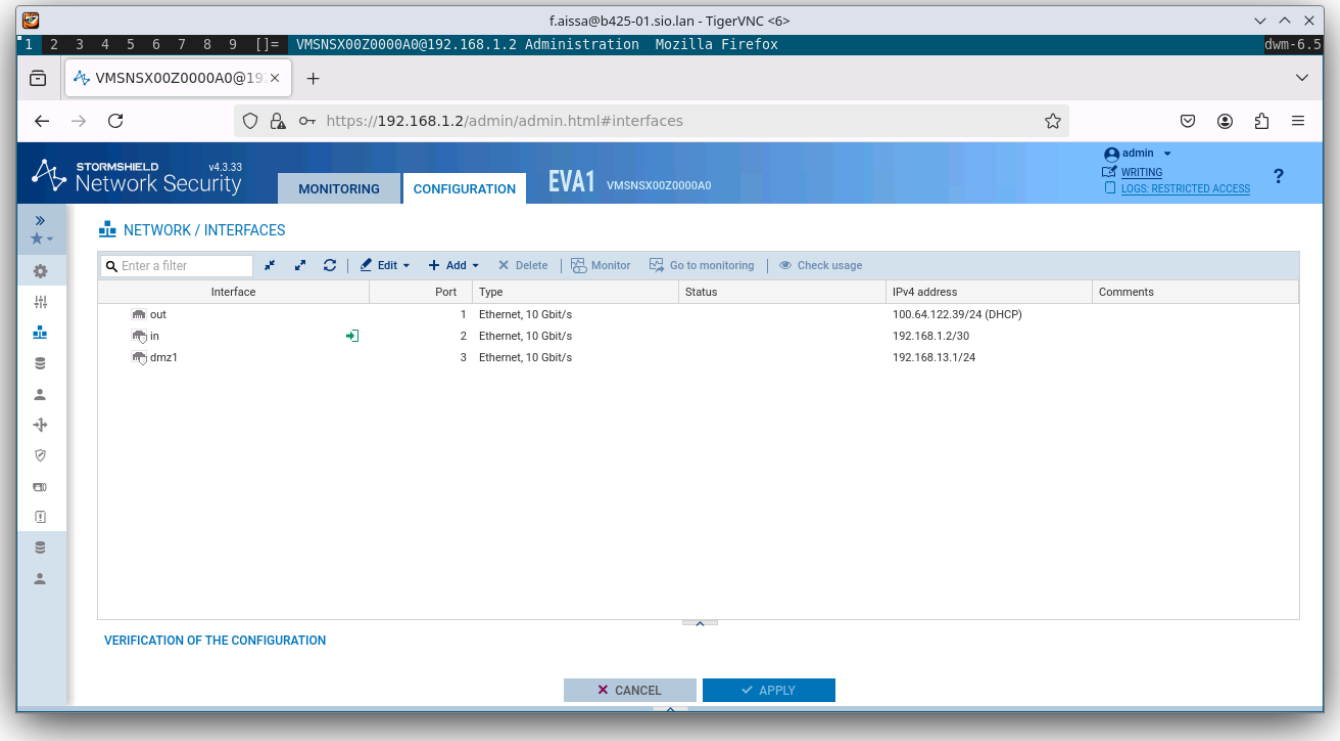

RT
vyos@RT:~$ show route
ZEBRA:
RIP:
RIPNG:
OSPF:
OSPF6:
BGP:
ISIS:
vyos@RT:~$ show interfaces
Codes: S - State, L - Link, u - Up, D - Down, A - Admin Down
Interface IP Address MAC VRF MTU S/L Descrip
tion
eth0 - 0c:71:15:4e:00:00 default 1500 u/u
eth0.100 192.168.11.1/26 0c:71:15:4e:00:00 default 1500 u/u
eth0.200 192.168.11.65/28 0c:71:15:4e:00:00 default 1500 u/u
eth0.300 192.168.11.97/27 0c:71:15:4e:00:00 default 1500 u/u
eth1 192.168.1.1/30 0c:71:15:4e:00:01 default 1500 u/u
eth2 192.168.12.1/24 0c:71:15:4e:00:02 default 1500 u/u
lo 127.0.0.1/8 00:00:00:00:00:00 default 65536 u/u
::1/128
vyos@RT:~$

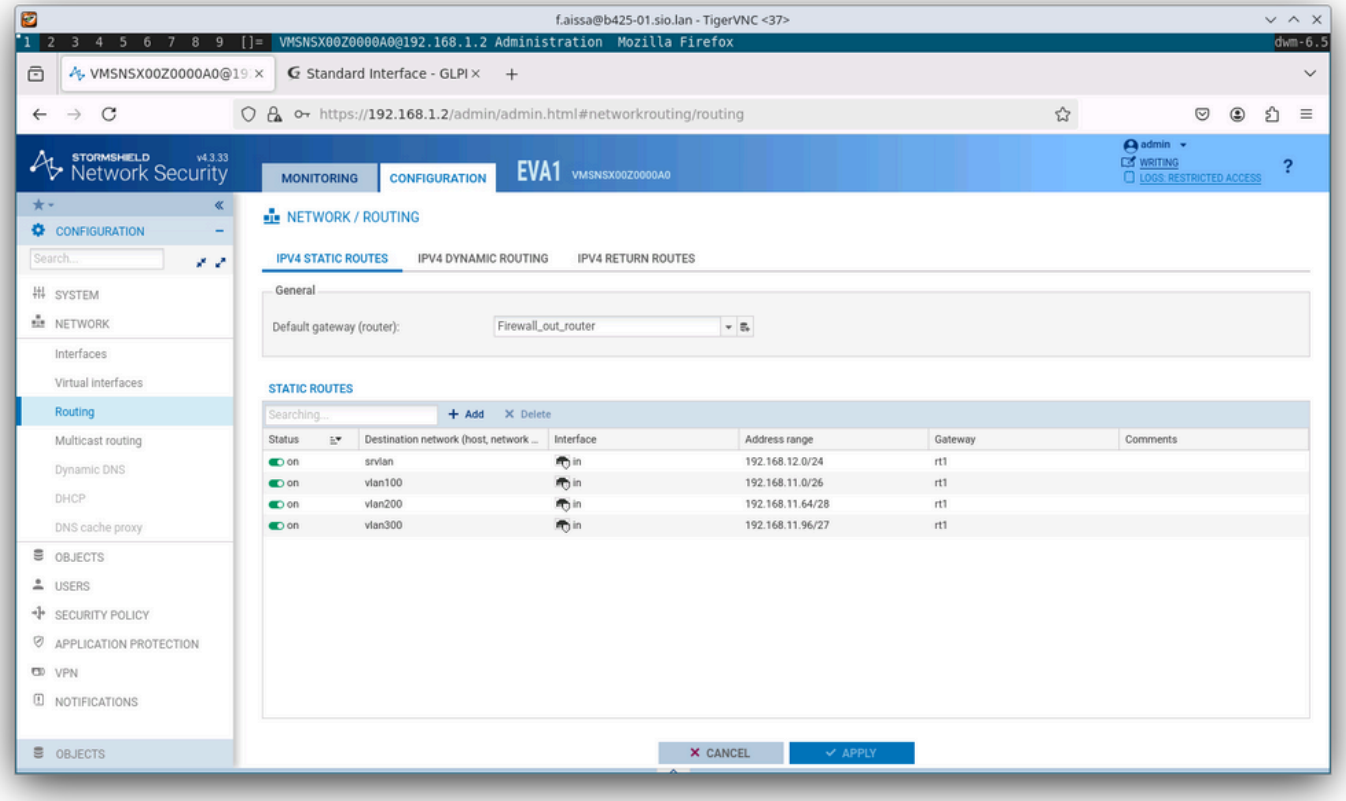
partie 3 :



sur fw :

j’ai ajouter un pc que j’ai relier avec in pour config les routes sur stormshield afin que les vlan accedent a internet et pour que depuis pc101 et 102 je puisse modifier

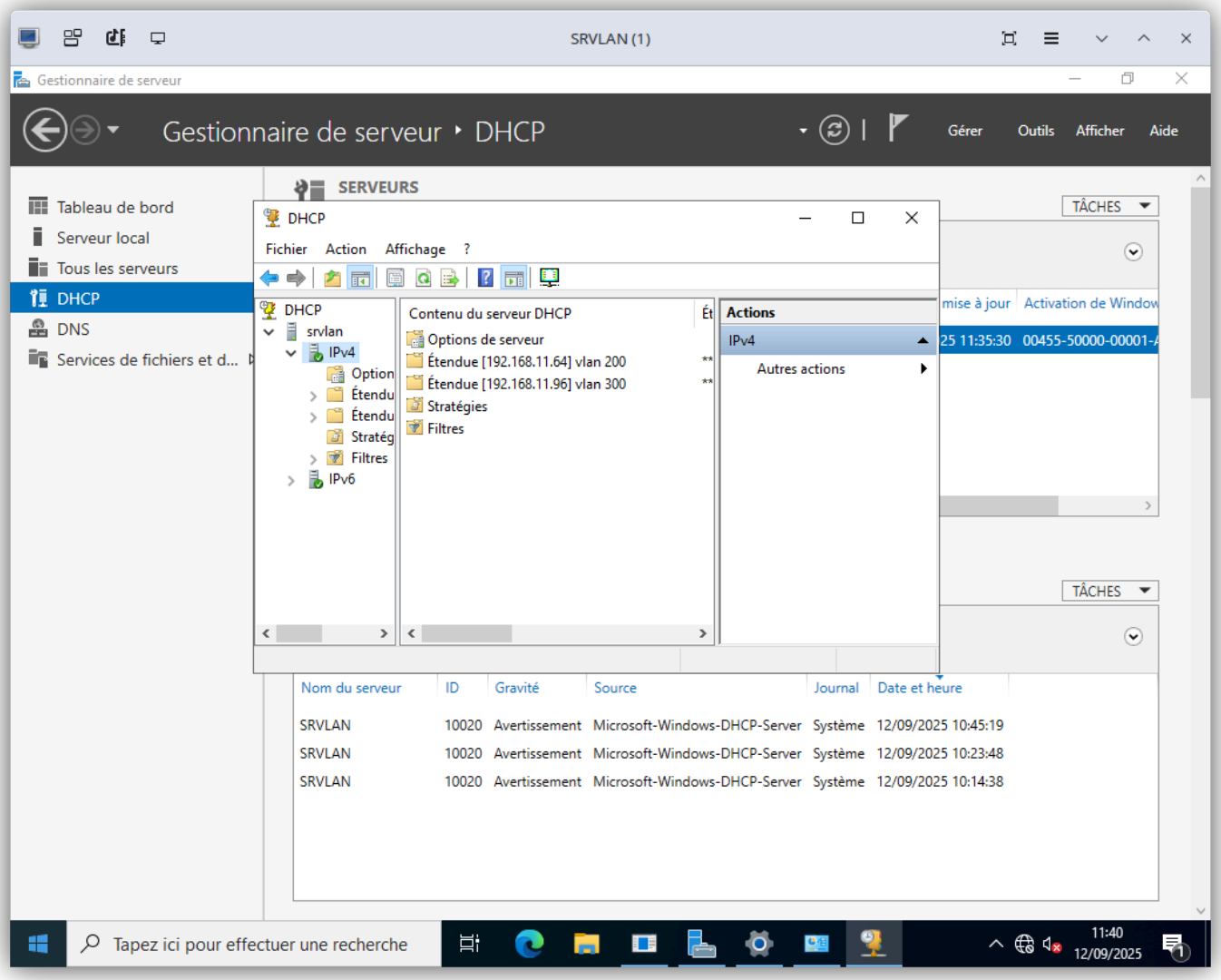

f.aissa@b425-01.sio.lan - TigerVNC <6>
VMSNSX00Z0000A0@192.168.1.2 Administration Mozilla Firefox
https://192.168.1.2/admin/admin.html#interfaces
STORMSHIELD Network Security v4.3.33
MONITORING
CONFIGURATION
EVA1 VMSNSX00Z0000A0
admin
WRITING
LOGS: RESTRICTED ACCESS
NETWORK / INTERFACES
Enter a filter
Edit
Add
Delete
Monitor
Go to monitoring
Check usage
Interface
Port
Type
Status
IPv4 address
Comments
out 1 Ethernet, 10 Gbit/s 100.64.122.39/24 (DHCP)
in 2 Ethernet, 10 Gbit/s 192.168.1.2/30
dmz1 3 Ethernet, 10 Gbit/s 192.168.13.1/24
VERIFICATION OF THE CONFIGURATION
CANCEL
APPLY


f.aissa@b425-01.sio.lan - TigerVNC <37>
VMSNSX00Z0000A0@192.168.1.2 Administration Mozilla Firefox
Standard Interface - GLPI
https://192.168.1.2/admin/admin.html#networkrouting/routing
STORMSHIELD Network Security v4.3.33
MONITORING
CONFIGURATION
EVA1 VMSNSX00Z0000A0
admin
WRITING
LOGS: RESTRICTED ACCESS
CONFIGURATION
SYSTEM
NETWORK
Interfaces
Virtual interfaces
Routing
Multicast routing
Dynamic DNS
DHCP
DNS cache proxy
OBJECTS
USERS
SECURITY POLICY
APPLICATION PROTECTION
VPN
NOTIFICATIONS
NETWORK / ROUTING
IPV4 STATIC ROUTES
IPV4 DYNAMIC ROUTING
IPV4 RETURN ROUTES
General
Default gateway (router): Firewall_out_router
STATIC ROUTES
Add
Delete
Status
Destination network (host, network ...
Interface
Address range
Gateway
Comments
on srvlan in 192.168.12.0/24 rt1
on vlan100 in 192.168.11.0/26 rt1
on vlan200 in 192.168.11.64/28 rt1
on vlan300 in 192.168.11.96/27 rt1
CANCEL
APPLY

partie 4

etape 1 :

config etendu dhcp sur srvlab



b/

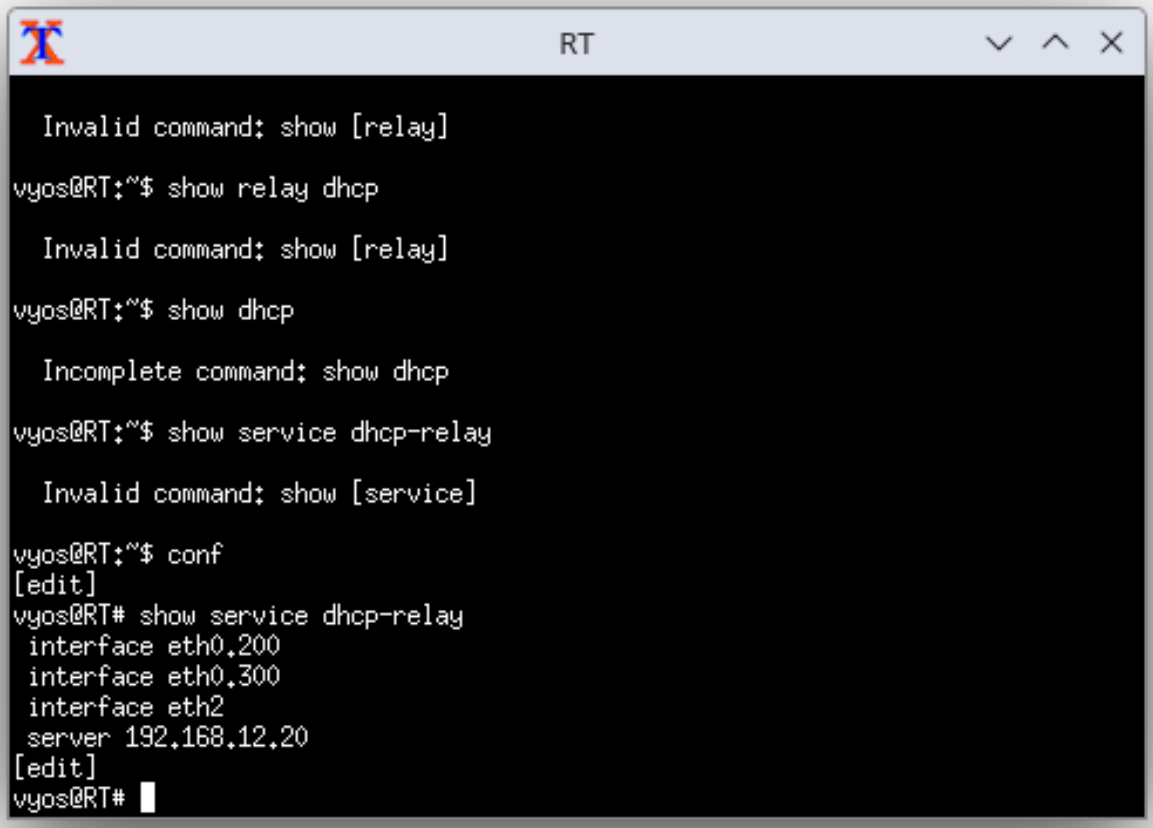
pour relais dhcp sur rt :

set service dhcp-relay server 192.168.12.20

set service dhcp-relay interface eth0.200

set service dhcp-relay interface eth0.300

set service dhcp-relay interface eth2



etape 2 :

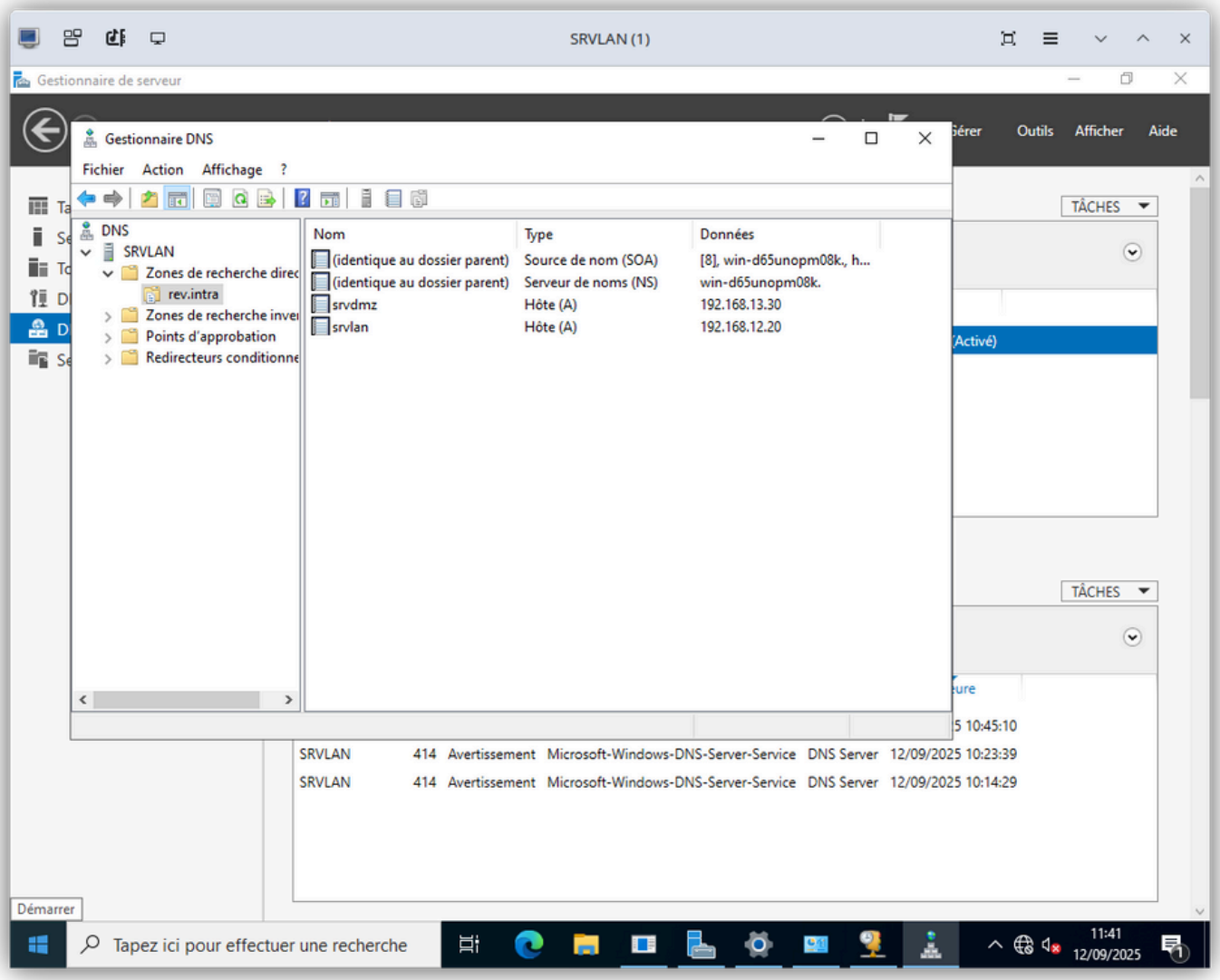
dns sur srvlan j'ai creer rôle **DNS**.

Créer une zone directe rev.intra.

Ajouter :

- srvlan.rev.intra → 192.168.12.20
- srvdmz.rev.intra → 192.168.13.30

Ajouter un redirecteur (externe) vers 100.64.122.1 (DNS du FAI).



etape 3 :

j’ai attrbibue une ip a srvdmz

sudo nano /etc/netplan/01-netcfg.yaml

network:

 version: 2

 renderer: networkd

 ethernets:

  ens3:

dhcp4: no

addresses:

- 192.168.13.30/24

gateway4: 192.168.13.1

nameservers:

addresses: [192.168.12.20, 8.8.8.8]

sudo netplan apply

apres des que j’ai config l’ip

(augmenter le size de srvdmz : Premièrement arrêtez la machine concerné.

Faire clique droit dessus et cliquer sur "Configure"

Une page s'ouvre avec plusieurs onglets en haut, aller sur "HDD" puis sur la ligne du "HDA (Primary Master)" cliquer sur "resize"

Dans la machine éxécutez la commande suivante :

lsblk

sudo growpart /dev/vda 1

sudo resize2fs /dev/vda1)

sudo apt update

sudo apt install apache2 -y

sudo apt install php php-mysql mariadb-server unzip -y

wget https://github.com/glpi-project/glpi/releases/download/11.0.0-rc4/glpi-11.0.0-rc4.tgz

tar -xvzf glpi-11.0.0-rc4.tgz

sudo mv glpi /var/www/html/

sudo chown -R www-data:www-data /var/www/html/glpi

et j’ai installé php : sudo apt install php8.2 libapache2-mod-php8.2 php8.2-cli php8.2-common \

php8.2-mysql php8.2-xml php8.2-curl php8.2-zip php8.2-gd php8.2-intl php8.2-mbstring -y

apres j’ai creer la bdd :

sudo mysql -u root

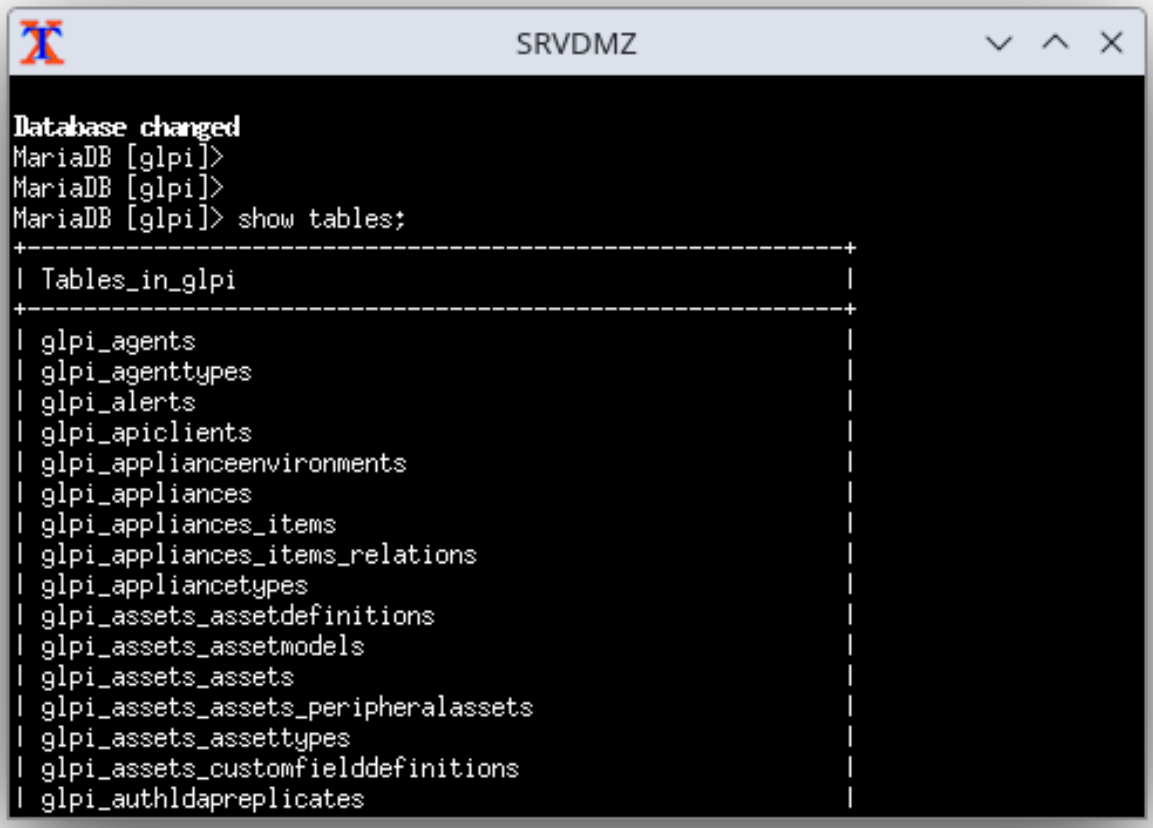
CREATE DATABASE glpi CHARACTER SET utf8mb4 COLLATE utf8mb4_unicode_ci;

CREATE USER 'glpiuser'@'localhost' IDENTIFIED BY 'sysadmin';

GRANT ALL PRIVILEGES ON glpi.* TO 'glpiuser'@'localhost';

FLUSH PRIVILEGES;

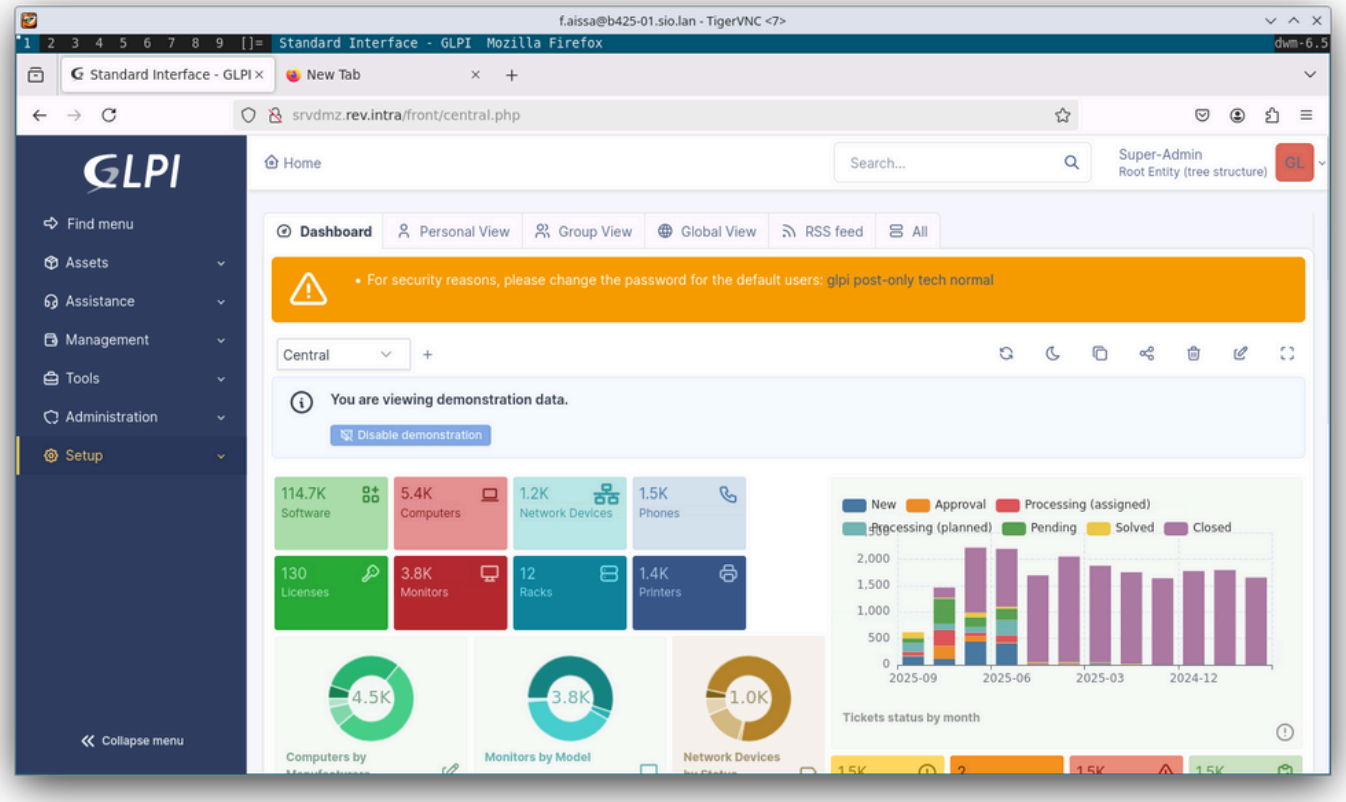
EXIT;



SRVDMZ

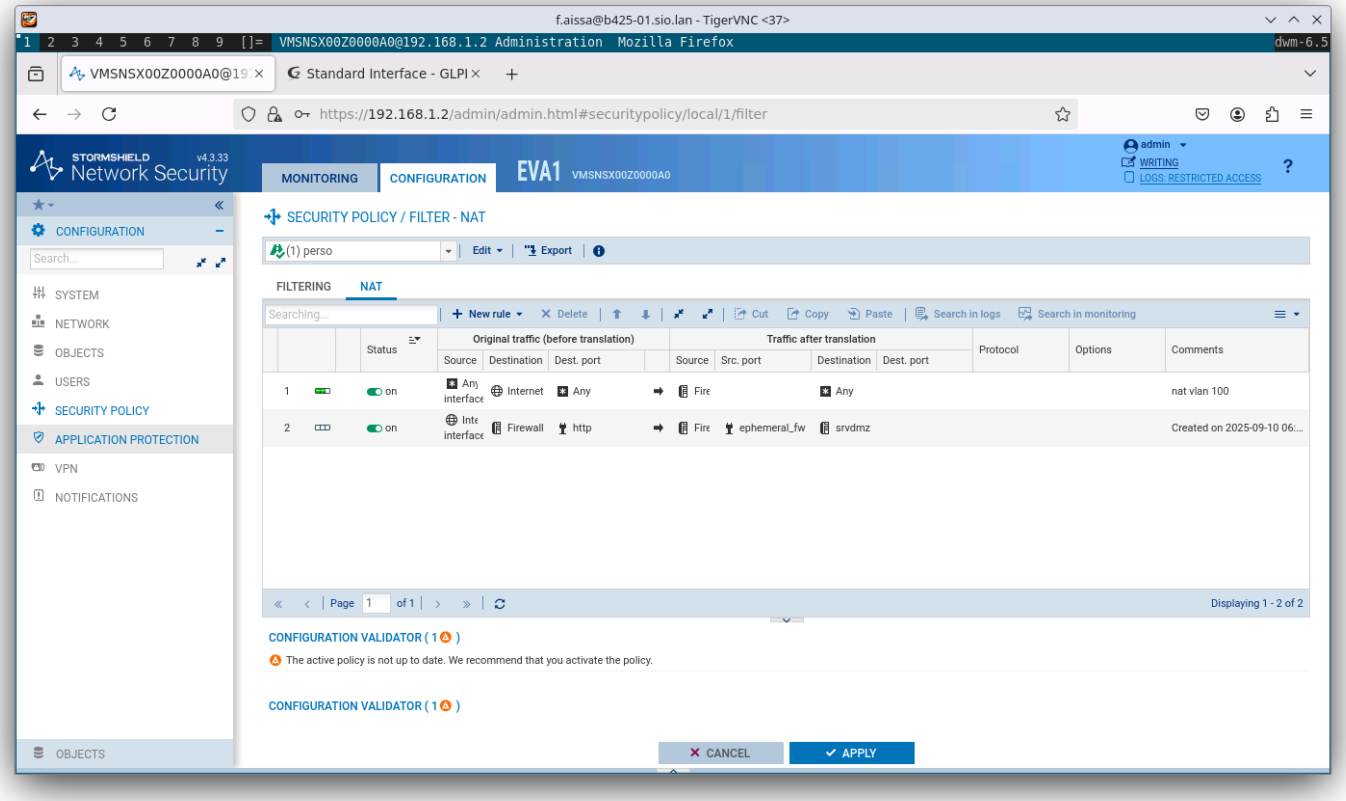
```
+----------------------------------------------------------------------------
----------------------------------+
1 row in set (0.000 sec)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON `glpi`.* TO `glpiuser`@`localhost`
    -> ;
Query OK, 0 rows affected (0.004 sec)

MariaDB [(none)]> SHOW GRANTS FOR 'glpiuser'@'localhost';
+----------------------------------------------------------------------------
----------------------------------+
| Grants for glpiuser@localhost
                                  |
+----------------------------------------------------------------------------
----------------------------------+
| GRANT USAGE ON *.* TO `glpiuser`@`localhost` IDENTIFIED BY PASSWORD '*96D6A0C2
685F450571C6500185A4FF596EF22098' |
| GRANT ALL PRIVILEGES ON `glpi`.* TO `glpiuser`@`localhost`
                                  |
+----------------------------------------------------------------------------
----------------------------------+
2 rows in set (0.000 sec)

MariaDB [(none)]>
```

glpi est bien accesible et fonctionnelle



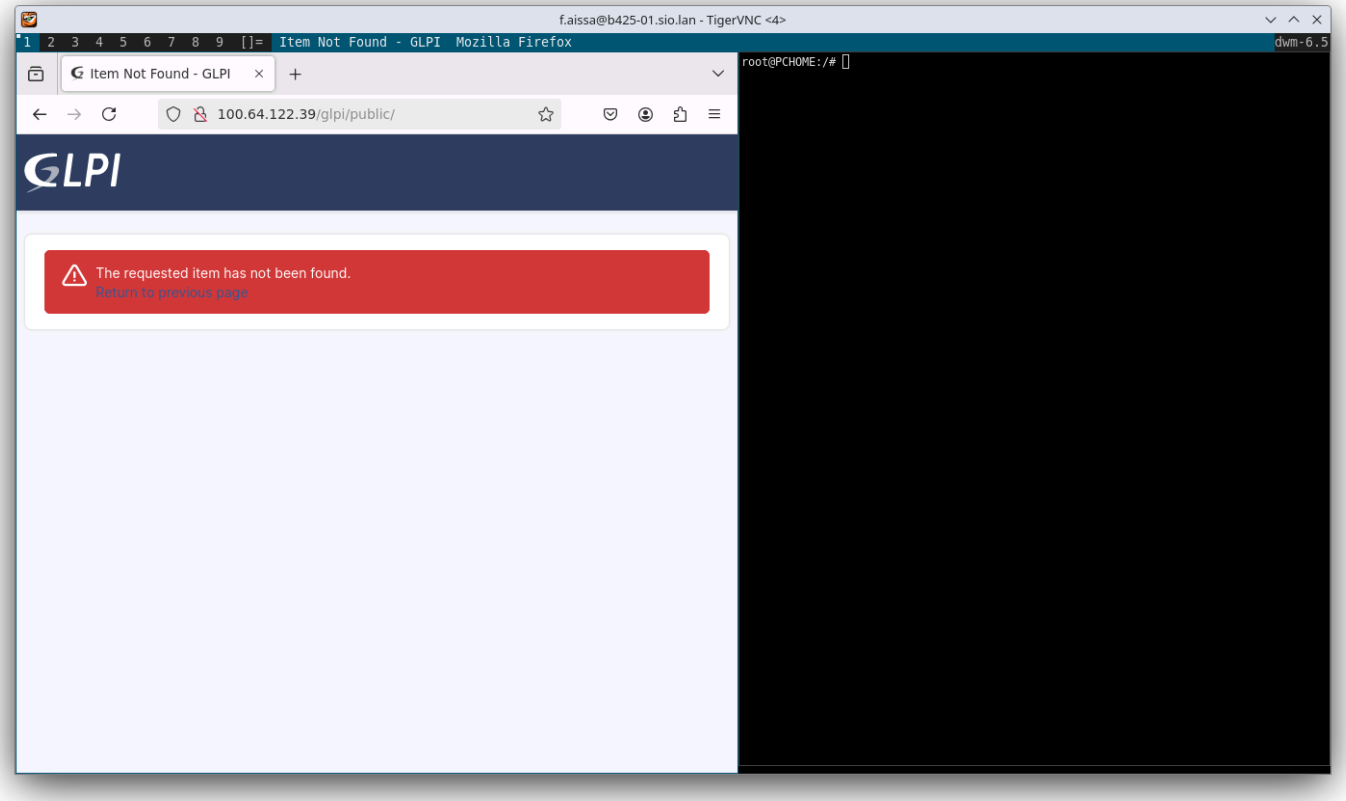
partie 5 :

a/



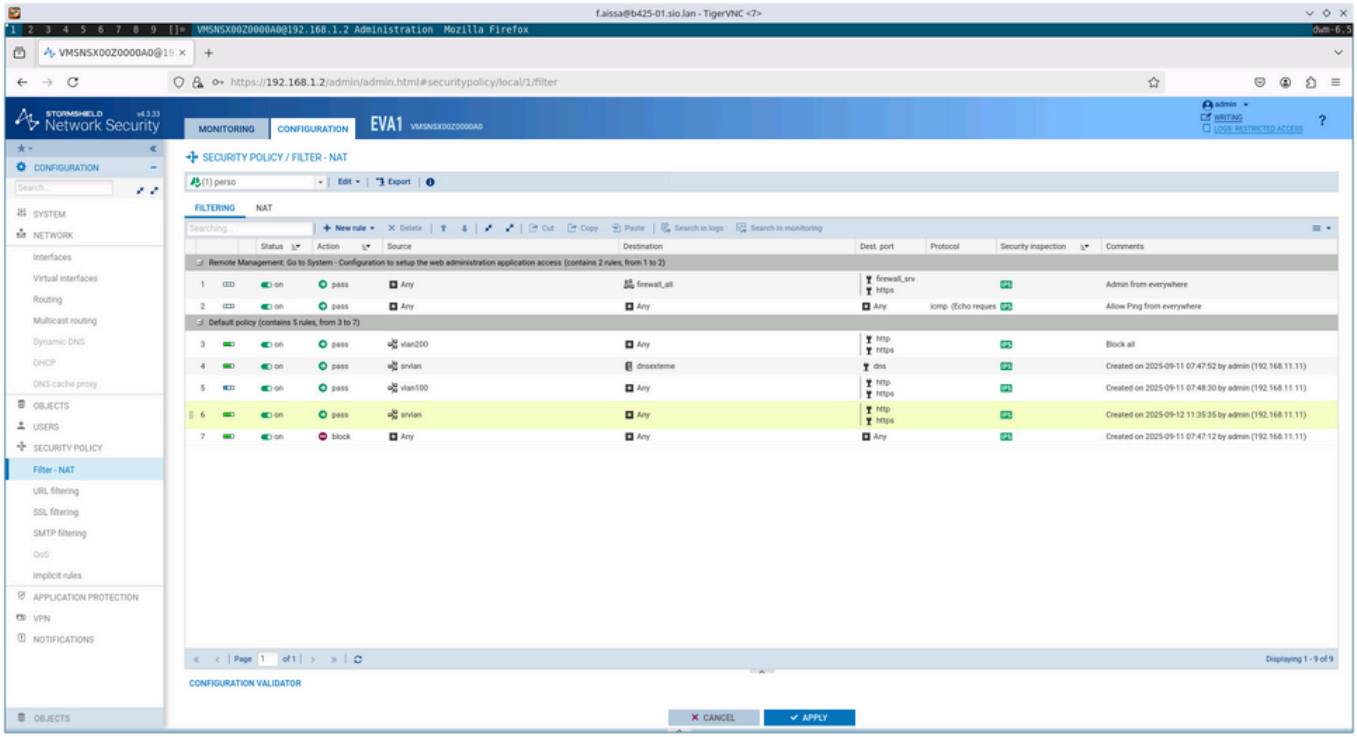
b/

pc home arrive a se co sur glpi

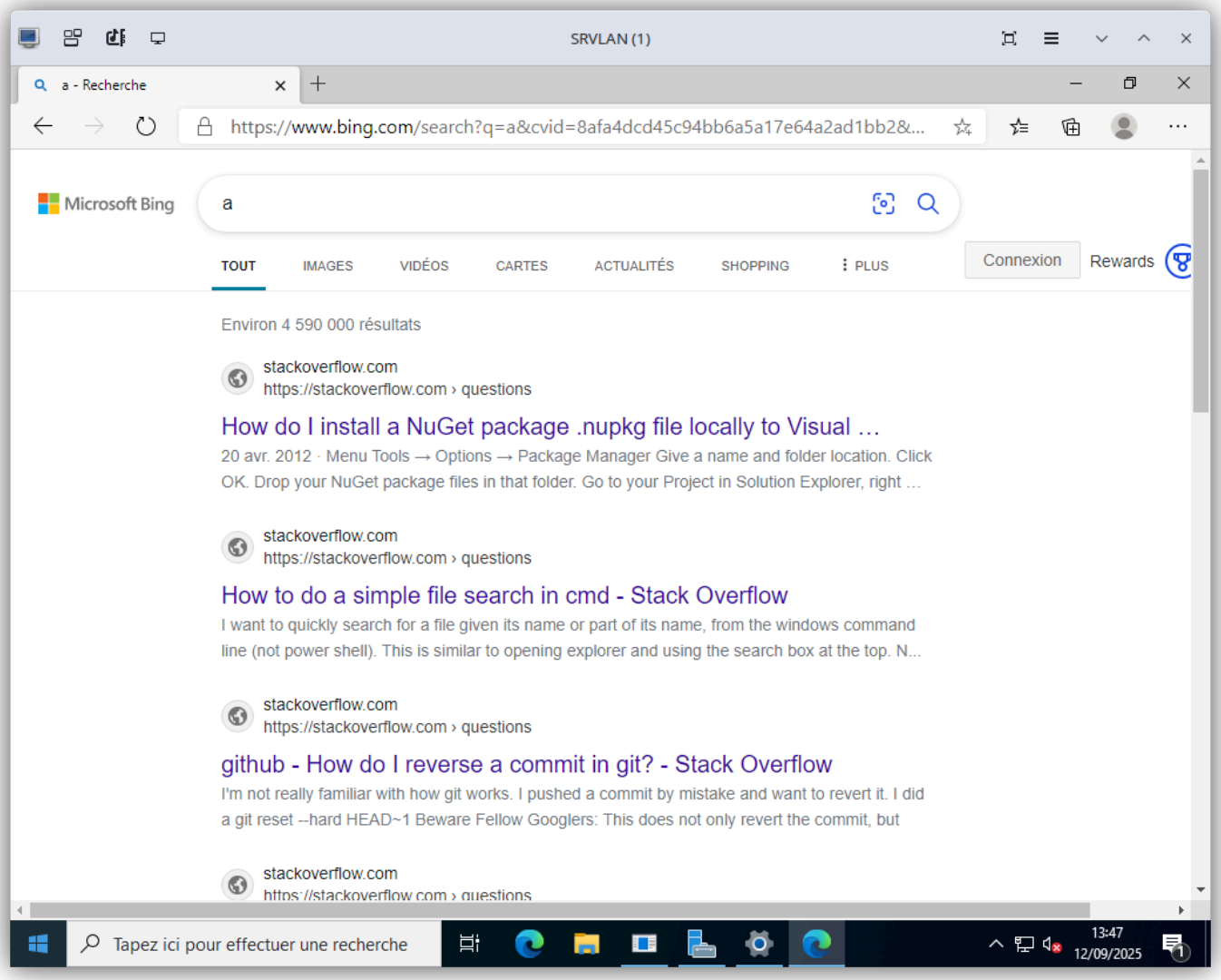


partie 6 :

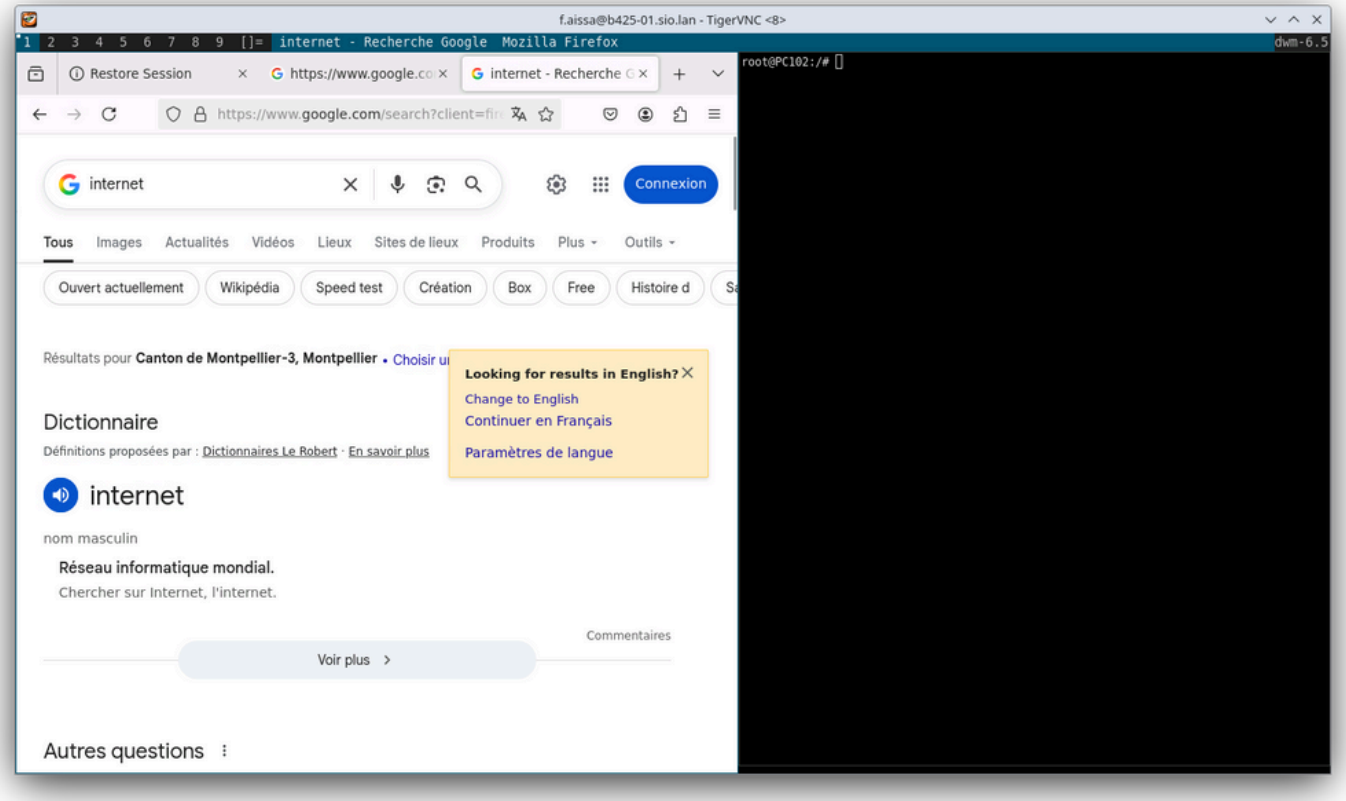
tous les regles fonctionnent

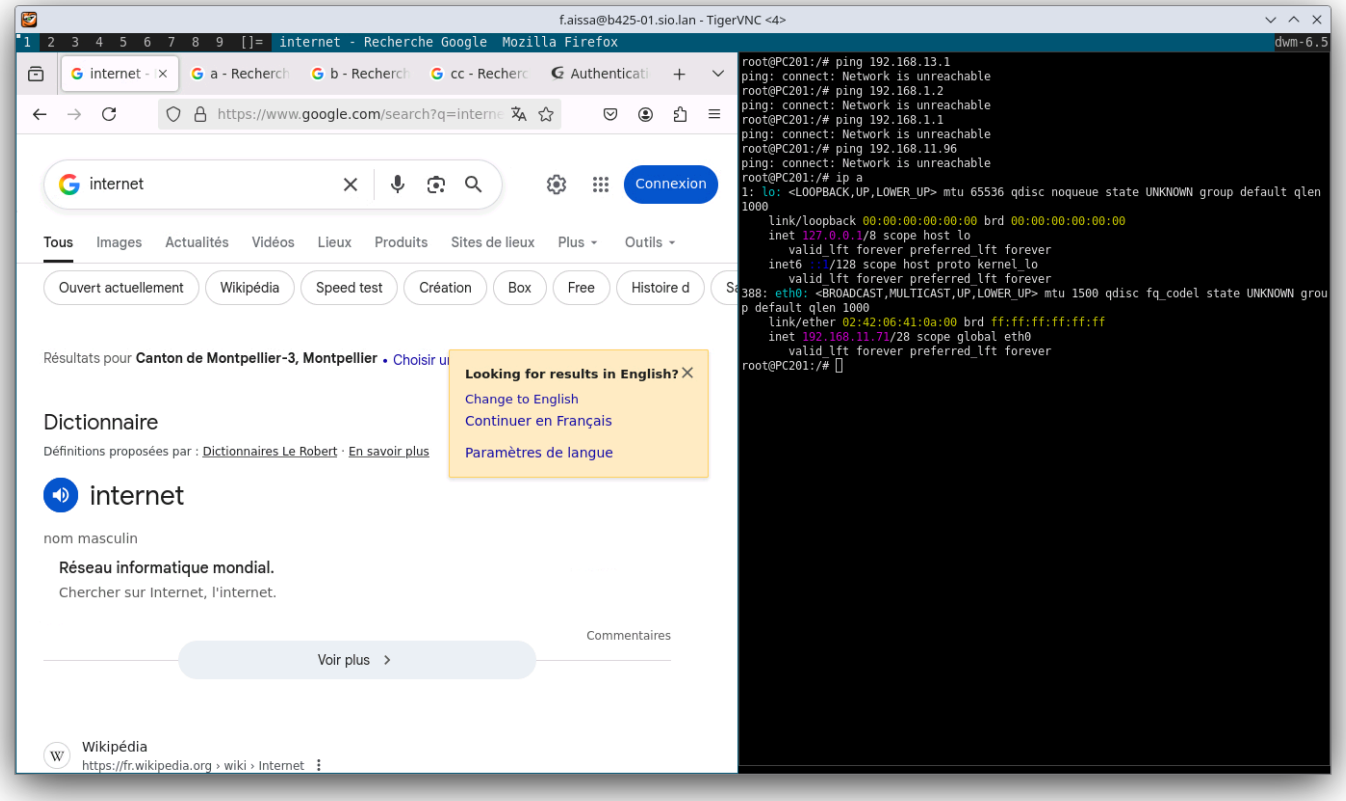


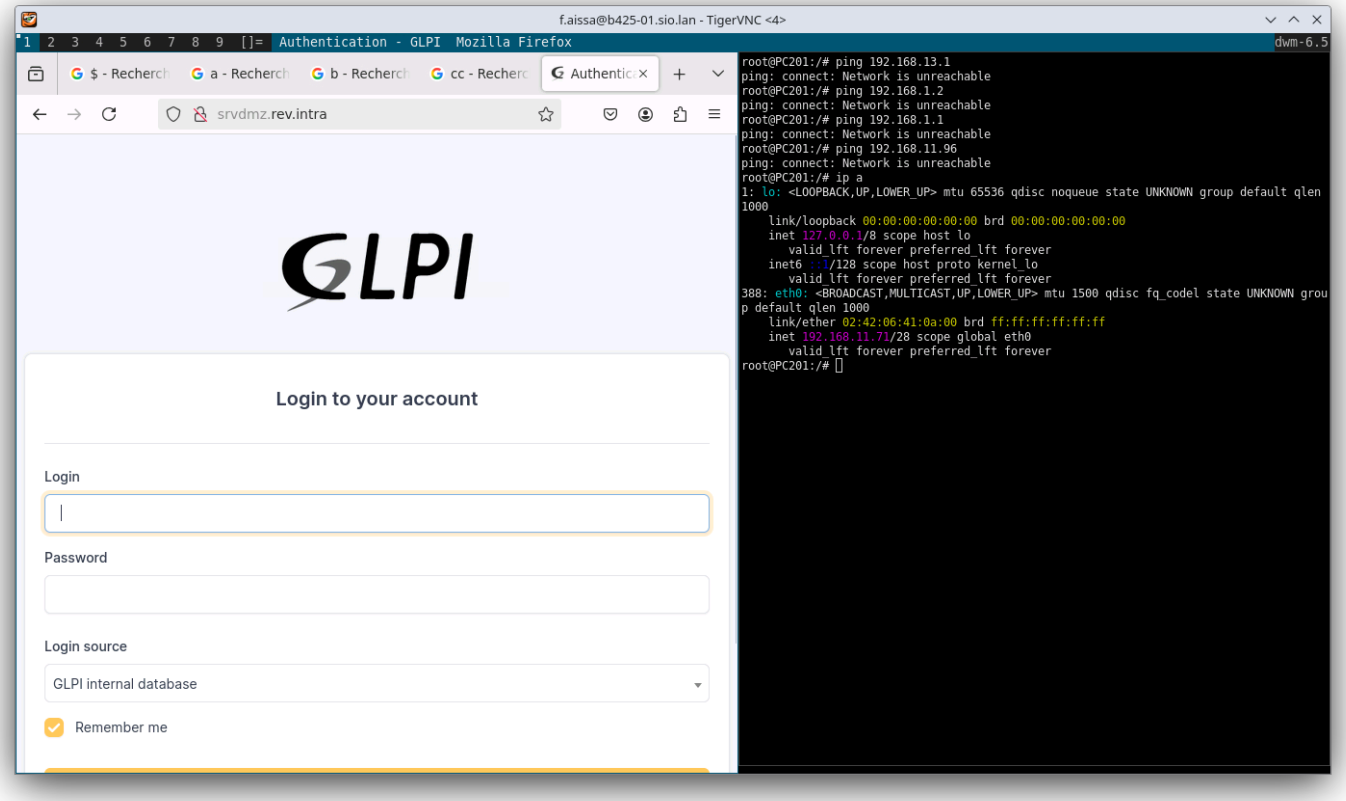
le srvlan accede a internet



pc du vlan commercial et administratif accede a internet


f.aissa@b425-01.sio.lan - TigerVNC <8>
internet - Recherche Google Mozilla Firefox
dwm-6.5
Restore Session
https://www.google.com/search?client=fir
internet
Connexion
Tous Images Actualités Vidéos Lieux Sites de lieux Produits Plus Outils
Ouvert actuellement Wikipédia Speed test Création Box Free Histoire d
Résultats pour Canton de Montpellier-3, Montpellier • Choisir u
Looking for results in English?
Change to English
Continuer en Français
Paramètres de langue
Dictionnaire
Définitions proposées par : Dictionnaires Le Robert · En savoir plus
internet
nom masculin
Réseau informatique mondial.
Chercher sur Internet, l'internet.
Commentaires
Voir plus
Autres questions
root@PC102:/#


f.aissa@b425-01.sio.lan - TigerVNC <4>
internet - Recherche Google Mozilla Firefox
dwm-6.5
internet - a - Recherch b - Recherch cc - Recherc Authenticati
https://www.google.com/search?q=interne
internet
Connexion
Tous Images Actualités Vidéos Lieux Produits Sites de lieux Plus Outils
Ouvert actuellement Wikipédia Speed test Création Box Free Histoire d
Résultats pour Canton de Montpellier-3, Montpellier • Choisir u
Looking for results in English?
Change to English
Continuer en Français
Paramètres de langue
Dictionnaire
Définitions proposées par : Dictionnaires Le Robert · En savoir plus
internet
nom masculin
Réseau informatique mondial.
Chercher sur Internet, l'internet.
Commentaires
Voir plus
Wikipédia
https://fr.wikipedia.org › wiki › Internet
root@PC201:/# ping 192.168.13.1
ping: connect: Network is unreachable
root@PC201:/# ping 192.168.1.2
ping: connect: Network is unreachable
root@PC201:/# ping 192.168.1.1
ping: connect: Network is unreachable
root@PC201:/# ping 192.168.11.96
ping: connect: Network is unreachable
root@PC201:/# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
inet 127.0.0.1/8 scope host lo
valid_lft forever preferred_lft forever
inet6 ::1/128 scope host proto kernel_lo
valid_lft forever preferred_lft forever
388: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UNKNOWN group default qlen 1000
link/ether 02:42:06:41:0a:00 brd ff:ff:ff:ff:ff:ff
inet 192.168.11.71/28 scope global eth0
valid_lft forever preferred_lft forever
root@PC201:/#


f.aissa@b425-01.sio.lan - TigerVNC <4>
1 2 3 4 5 6 7 8 9 []= Authentication - GLPI Mozilla Firefox
dwm-6.5
$ - Recherch
a - Recherch
b - Recherch
cc - Recherc
Authentic
srvdmz.rev.intra
GLPI
Login to your account
Login
Password
Login source
GLPI internal database
Remember me
root@PC201:/# ping 192.168.13.1
ping: connect: Network is unreachable
root@PC201:/# ping 192.168.1.2
ping: connect: Network is unreachable
root@PC201:/# ping 192.168.1.1
ping: connect: Network is unreachable
root@PC201:/# ping 192.168.11.96
ping: connect: Network is unreachable
root@PC201:/# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
inet 127.0.0.1/8 scope host lo
valid_lft forever preferred_lft forever
inet6 ::1/128 scope host proto kernel_lo
valid_lft forever preferred_lft forever
388: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UNKNOWN group default qlen 1000
link/ether 02:42:06:41:0a:00 brd ff:ff:ff:ff:ff:ff
inet 192.168.11.71/28 scope global eth0
valid_lft forever preferred_lft forever
root@PC201:/#