MISE EN PLACE
DU SI DE 3 BIBLIOTHEQUES

SOMMAIRE

- PRESENTATION DE L'EQUIPE
- SCHEMA THEORIQUE DU RESEAU
- GESTION DU BACKUP
- ACTIVE DIRECTORY (AD)
- VIRTUAL PRIVATE NETWORK (VPN)

L'EQUIPE

PRESENTATION DE L'EQUIPE

TOUS : Communication entre les différents sites et le serveur.

- SOLUTIONS : VPN entre tout les sites + Firewall

THIBAULT : Sauvegarde des serveurs et backup des sauvegardes.

- SOLUTION : Acronis + FileZilla Client (avec script) + (VimBackup) + VirtualBox

THOMAS : Router entre les sites.

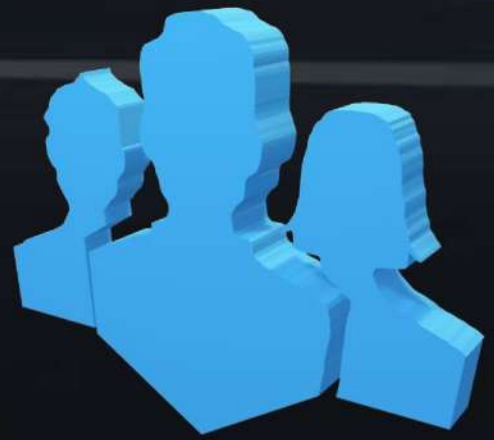
- SOLUTION : Théorique avec Cisco Packet Tracer

DYLAN : Active Directory (SERVEUR PRINCIPAL)

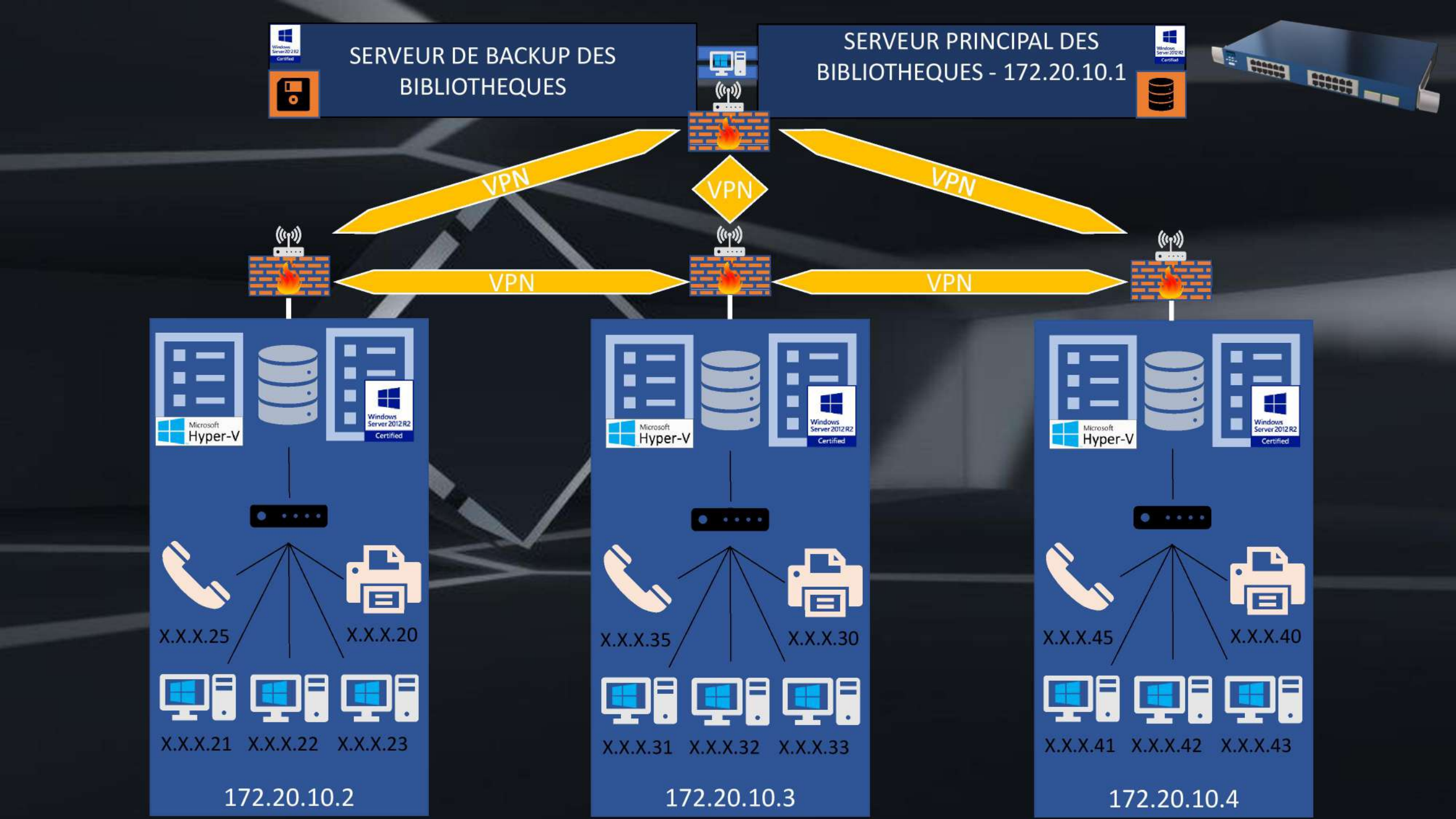
- SOLUTION : Windows Server 2012

EVAN : 3 VM pour les serveurs des sites avec serveur fichiers

- SOLUTION : FileZilla Server / Client + VirtualBox

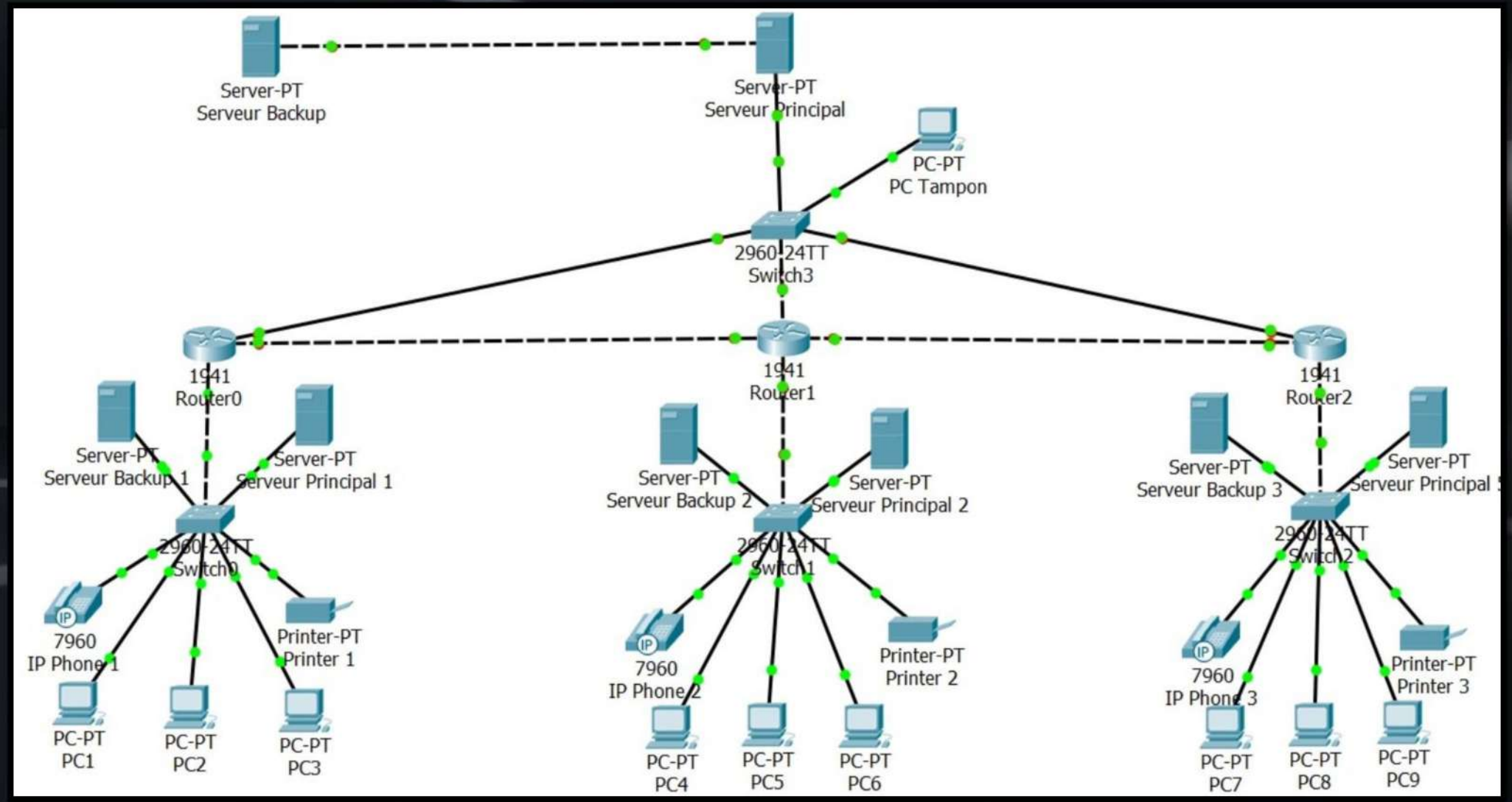


SCHEMA THEORIQUE DU RESEAU


SERVEUR DE BACKUP DES BIBLIOTHEQUES
SERVEUR PRINCIPAL DES BIBLIOTHEQUES - 172.20.10.1
VPN
VPN
VPN
VPN
VPN
Microsoft Hyper-V
Windows Server 2012 R2 Certified
X.X.X.25
X.X.X.20
X.X.X.21
X.X.X.22
X.X.X.23
172.20.10.2
X.X.X.35
X.X.X.30
X.X.X.31
X.X.X.32
X.X.X.33
172.20.10.3
X.X.X.45
X.X.X.40
X.X.X.41
X.X.X.42
X.X.X.43
172.20.10.4

PLAN THEORIQUE

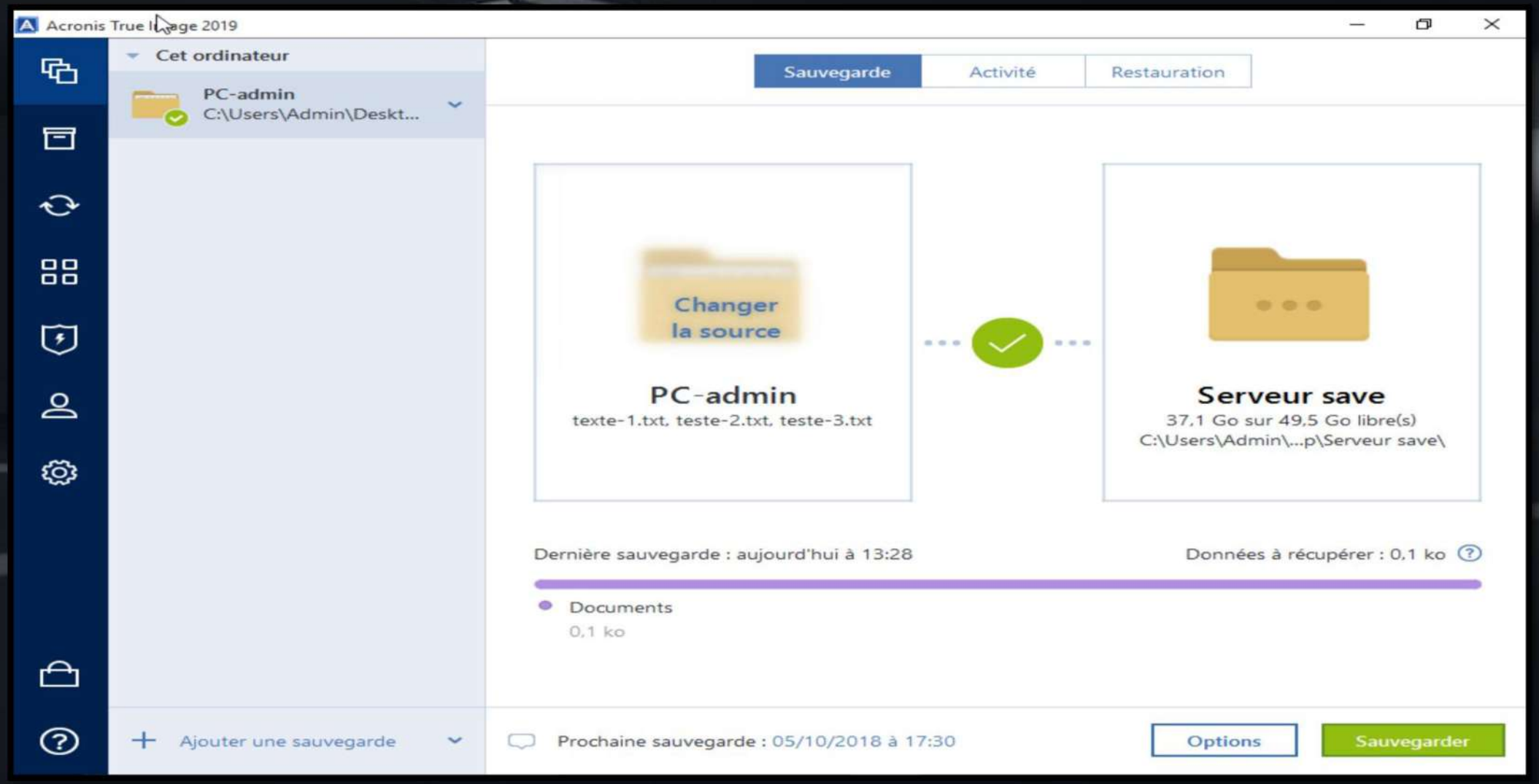
- CISCO PACKET TRACER -



GESTION DU BACKUP

UTILISATION DE ACRONIS

- AUTOMATISATION DU BACKUP -



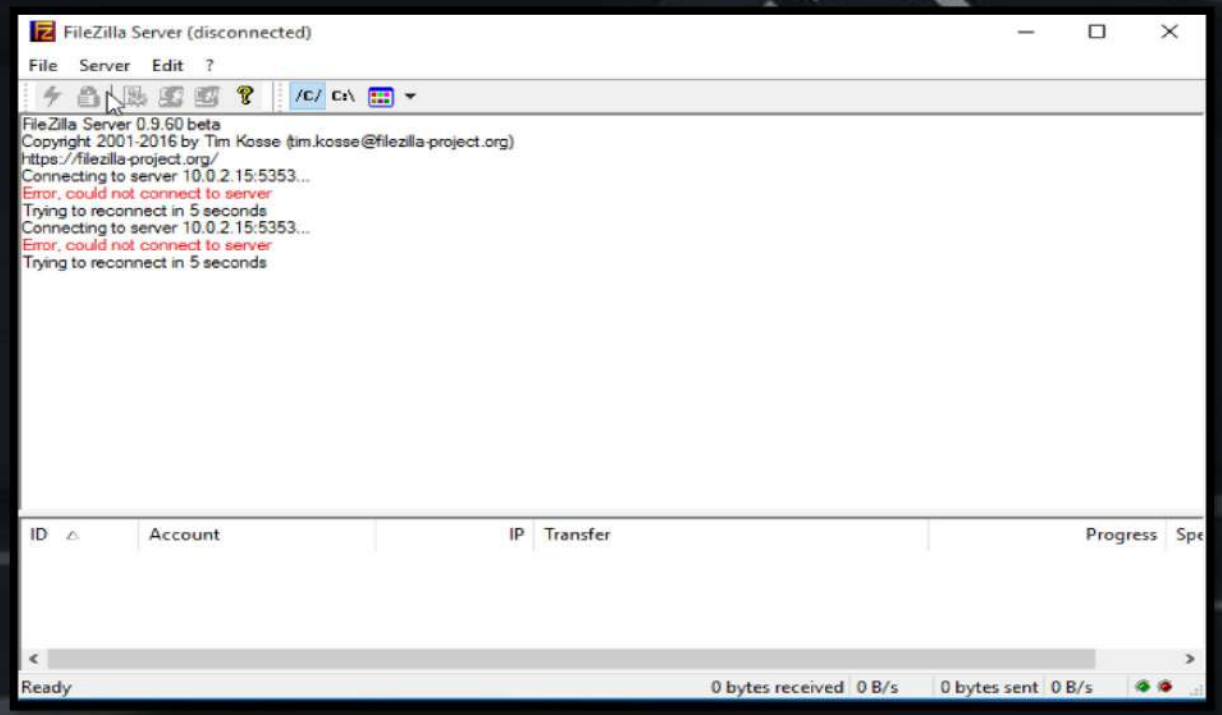
SAUVEGARDE AUTO

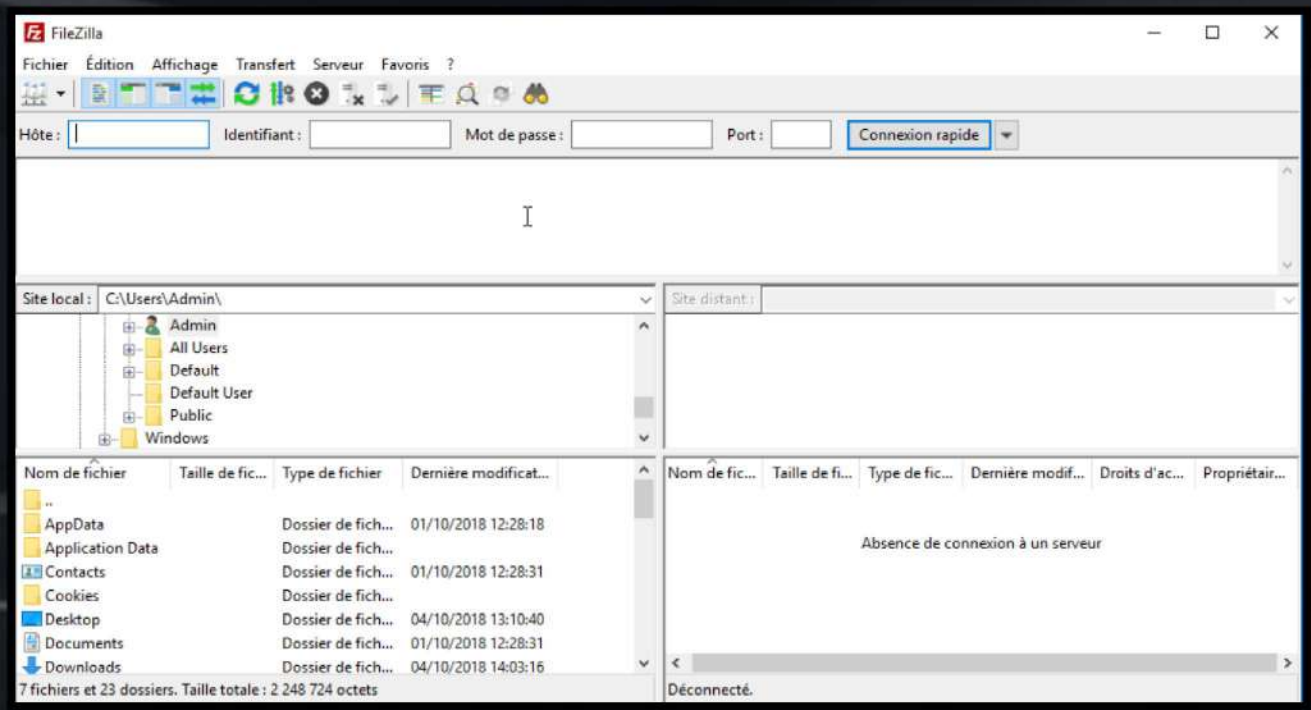
- Script planificateur de tâches -

```
@echo off

echo. >> C:\Users\Aston\Desktop\save.log

echo ********** %date% - %time% ************ >> C:\Users\Aston\Desktop\save.log
echo Démarrage de la copie.... >> C:\Users\Aston\Desktop\save.log
echo Sauvegarde du serveur web >> C:\Users\Aston\Desktop\save.log

xcopy "C:\Users\Aston\www" "Y:\serverw" /e /i /c /h /y

echo Fin de copie.... %date% - %time% >> C:\Users\Aston\Desktop\save.log
echo ********************************************** >> C:\Users\Aston\Desktop\save.log
echo. >> C:\Users\Aston\Desktop\save.log
```

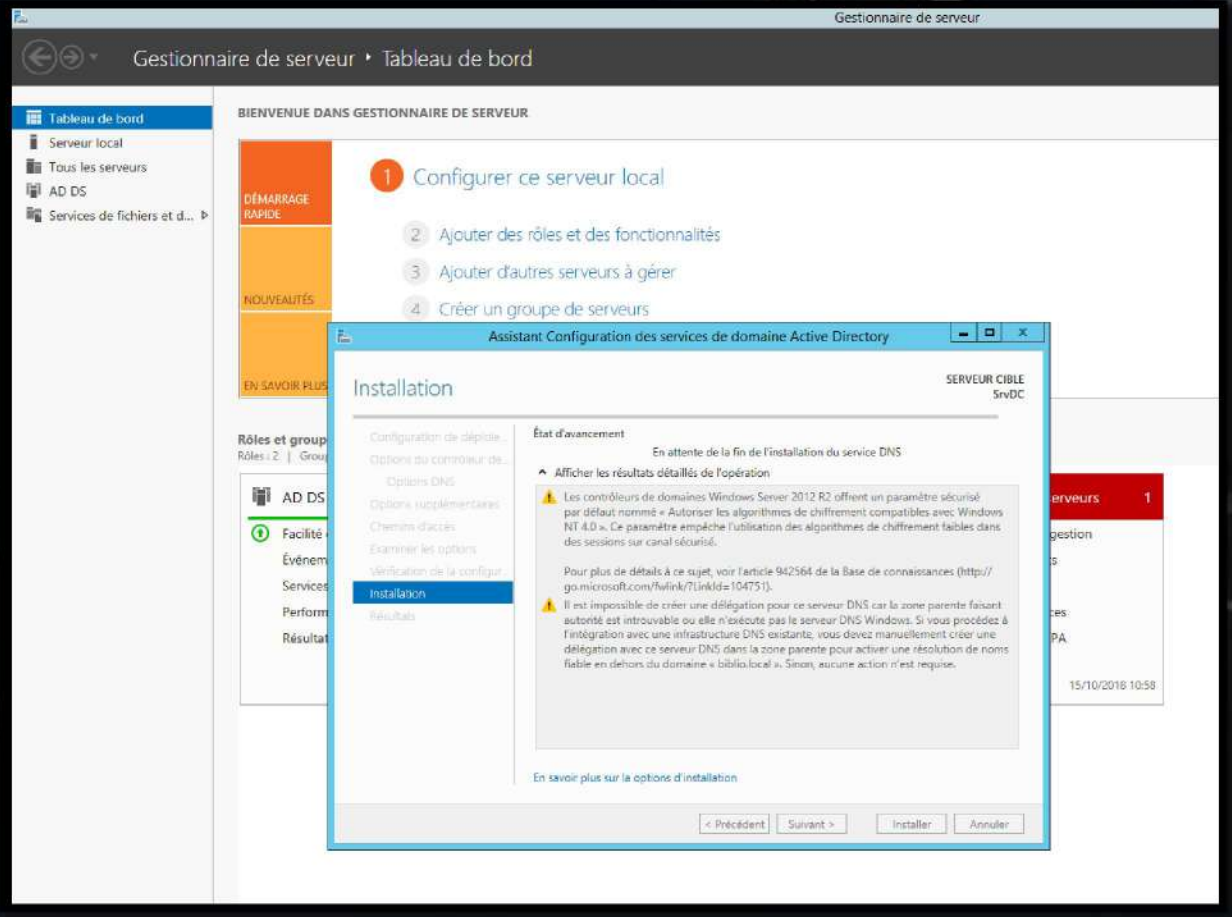
CREATION DU SERVEUR DE FICHIERS

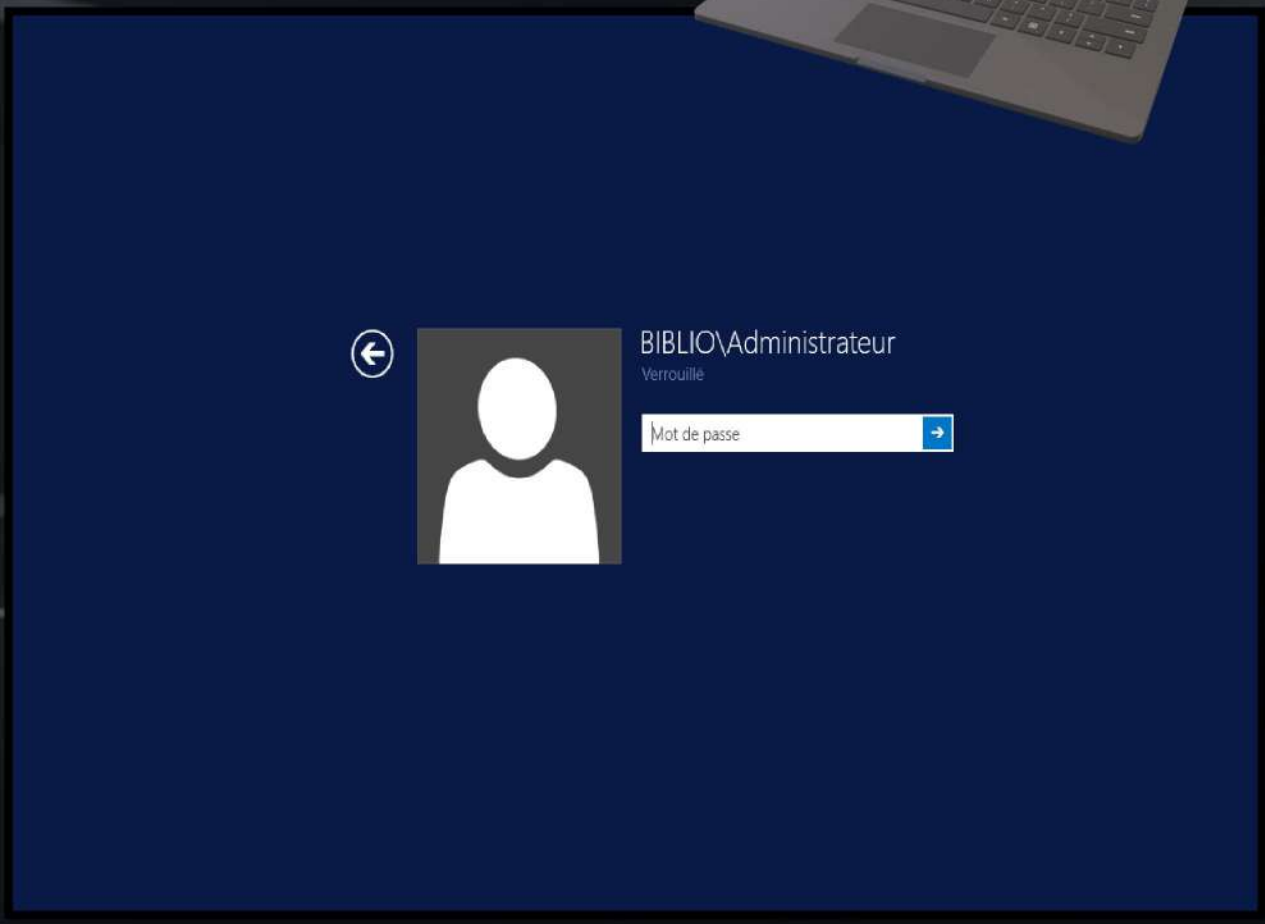
- FileZilla Server -



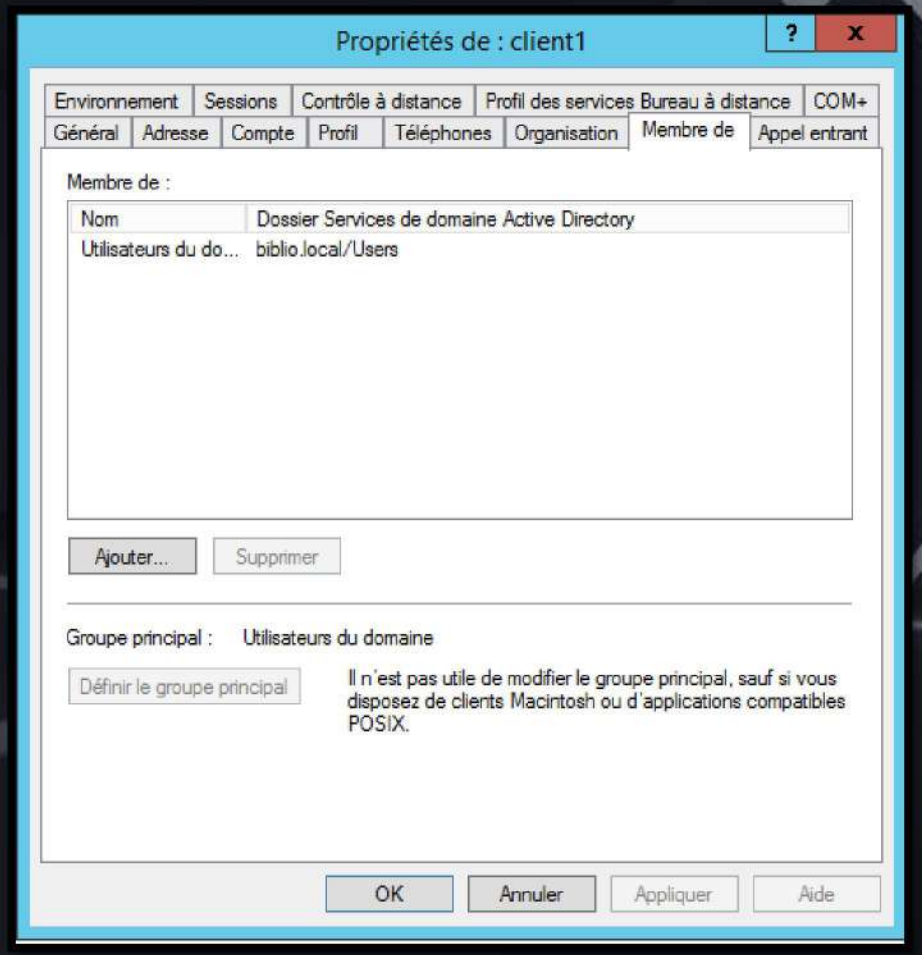


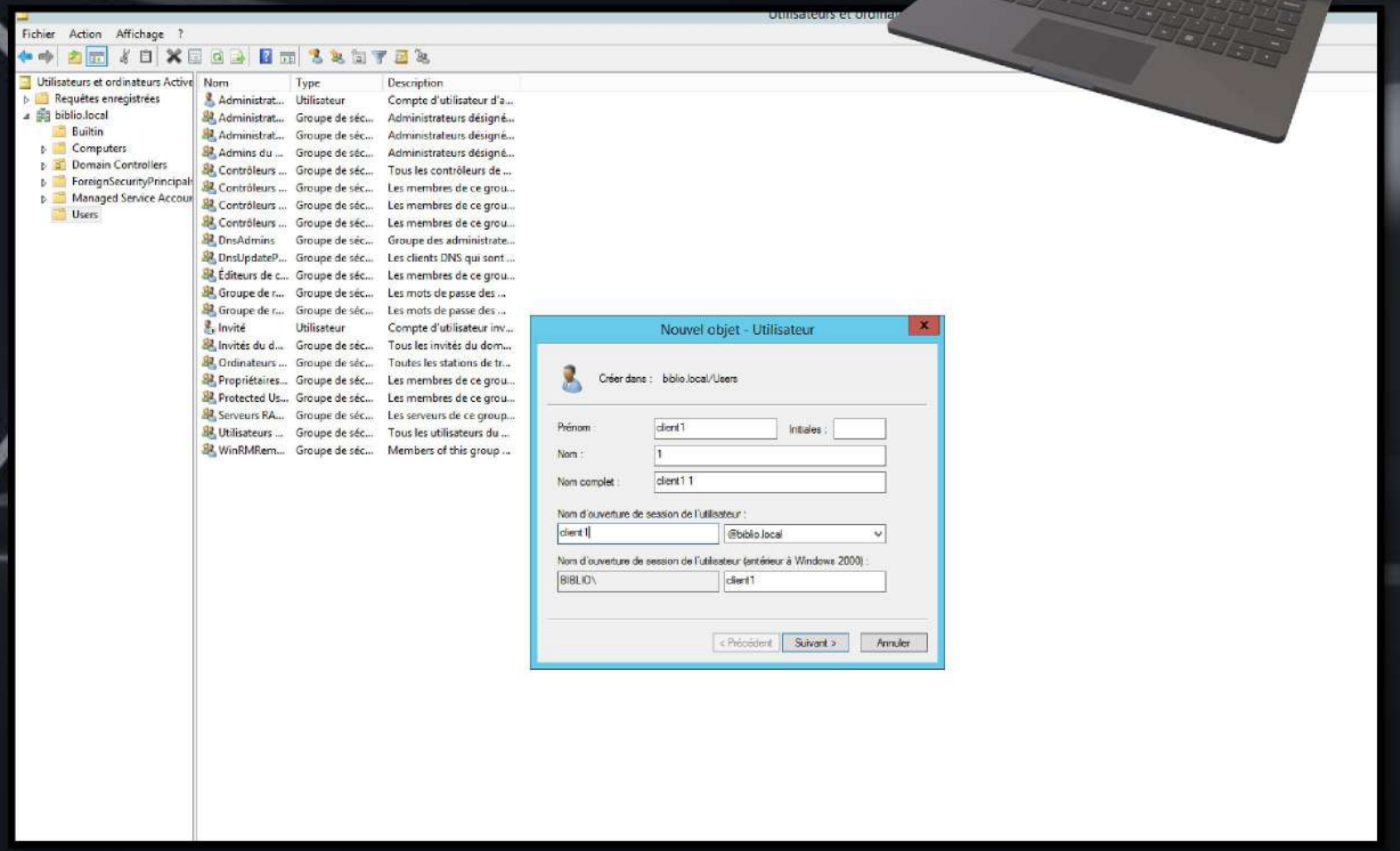
CREATION DE L'A.D ET CONNEXION





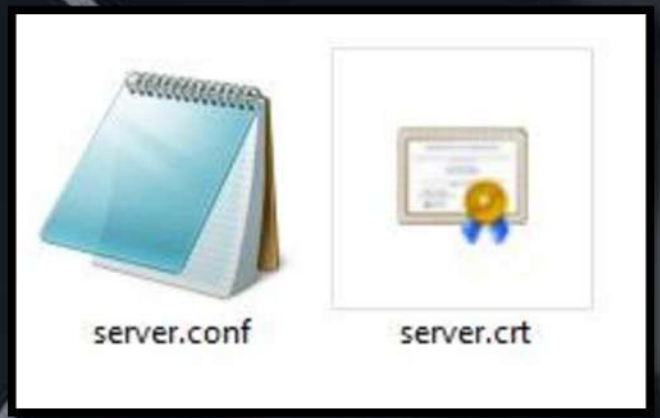
CONFIGURATION DE L'A.D





CONFIGURATION
SERVEUR VPN

```
# Serveur TCP/443
mode server
proto tcp
port 443
dev tun

# Clés et certificats
ca ca.crt
cert server.crt
key server.key
dh dh2048.pem
tls-auth ta.key 0
cipher AES-256-CBC

# Réseau
server 10.8.0.0 255.255.255.0
push "redirect-gateway def1 bypass-dhcp"
push "dhcp-option DNS 8.8.8.8"
push "dhcp-option DNS 8.8.4.4"
keepalive 10 120

# Sécurite
user nobody
group nogroup
chroot /etc/openvpn/jail
persist-key
persist-tun
comp-lzo

# Log
verb 3
mute 20
status openvpn-status.log
log-append /var/log/openvpn.log
```



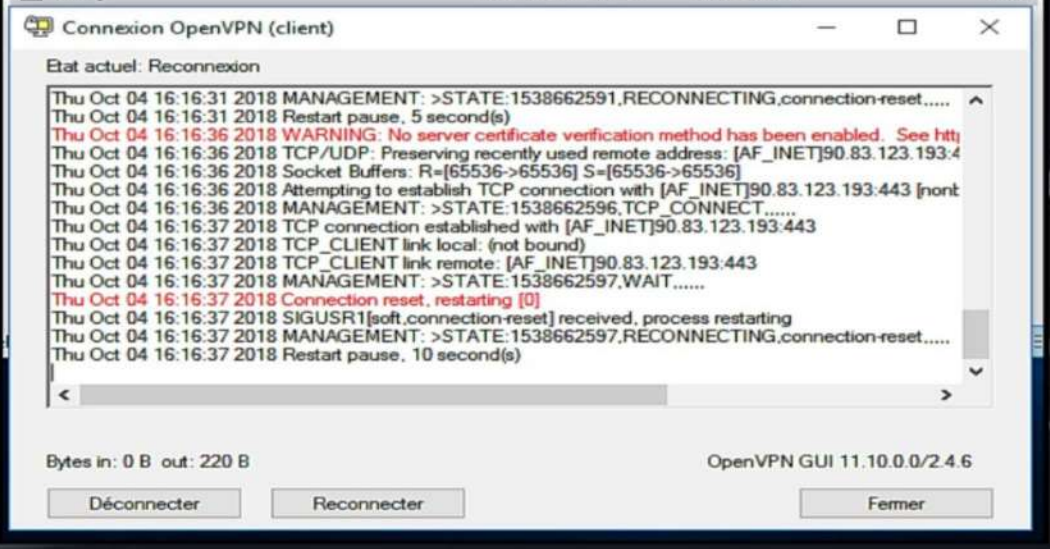

```
utec@utec:~$ sudo su
[sudo] password for utec:
root@utec:/home/utec# service openvpn restart
[ ok ] Stopping virtual private network daemon: server.
[ ok ] Starting virtual private network daemon: server.
root@utec:/home/utec#
```

```
apt-get update && apt-get install openvpn

mkdir /etc/openvpn/keys

cp -r /usr/share/easy-rsa/ /etc/openvpn

chown -R $USER /etc/openvpn/easy-rsa/

nano /etc/openvpn/easy-rsa/vars
on insert dans le fichier :
export KEY_COUNTRY="FR"
export KEY_PROVINCE="FR"
export KEY_CITY="FR"
export KEY_ORG="exemple.com"
export KEY_EMAIL="exemple@exemple.com"

cd /etc/openvpn/easy-rsa/
source vars
./clean-all
./build-dh
./pkitool --initca
./pkitool --server server
openvpn --genkey --secret keys/ta.key

mkdir /etc/openvpn/jail

mkdir /etc/openvpn/clientconf
```

OPEN VPN CLIENT

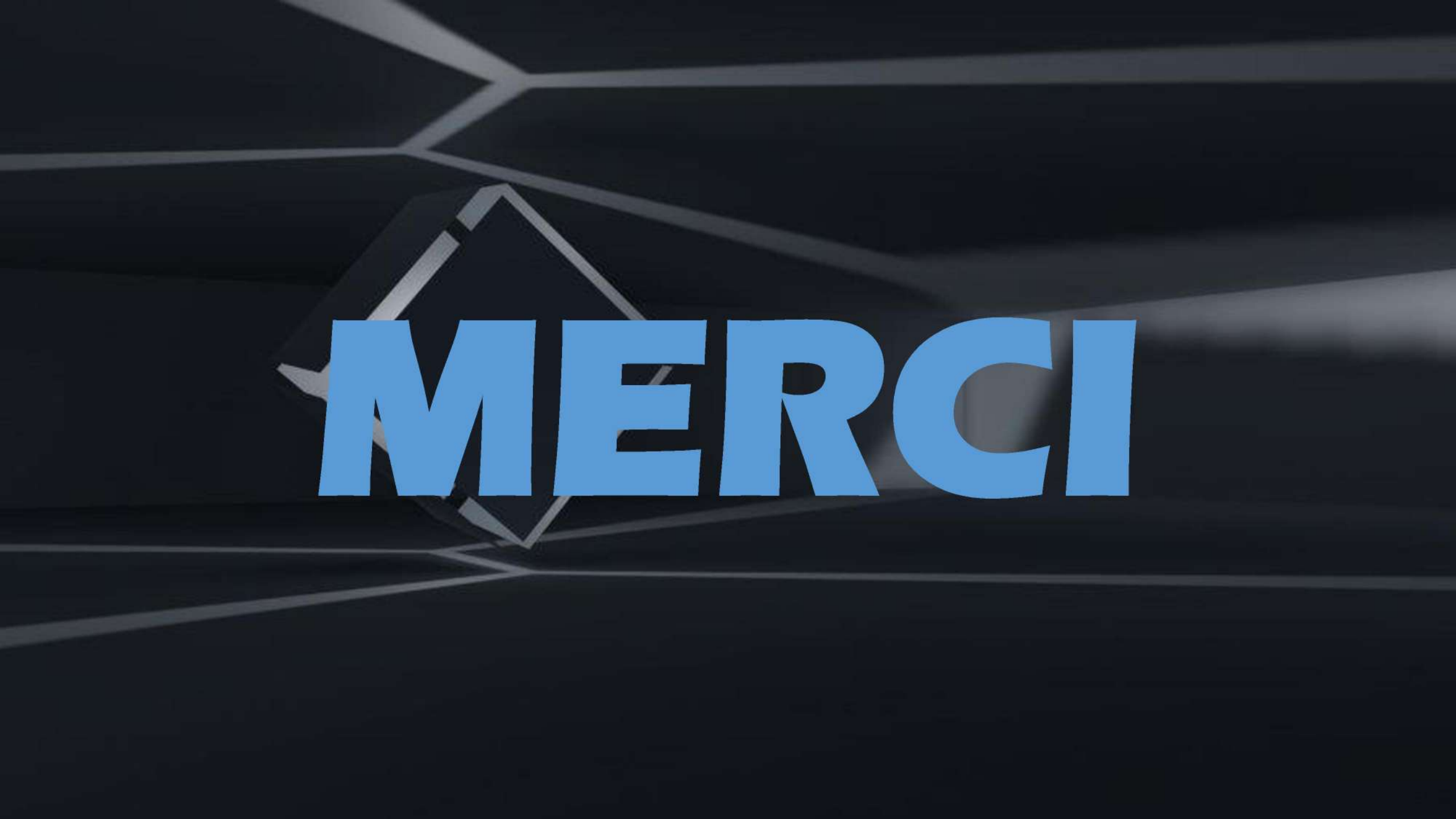
- INTERFACE ET FICHIERS NECESSAIRES -

ca	04/10/2018 16:14	Certificat de sécur...	2 Ko
client.conf	04/10/2018 16:14	Fichier CONF	1 Ko
client	04/10/2018 16:14	OpenVPN Config ...	1 Ko
pcportablenicolargo	04/10/2018 16:14	Certificat de sécur...	4 Ko
pcportablenicolargo.key	04/10/2018 16:14	Fichier KEY	1 Ko
ta.key	04/10/2018 16:14	Fichier KEY	1 Ko



Nom	Taille	Compressé	Type	Modifié	CRC32
..			Disque local		
ca.crt	1 350	720	Certificat de sécurité	04/10/2018 14:15	BC8728E4
client.conf	396	216	Fichier CONF	04/10/2018 14:22	FA035C79
client.ovpn	396	216	Fichier OVPN	04/10/2018 14:22	FA035C79
pcportablenicolargo.crt	3 942	1 967	Certificat de sécurité	04/10/2018 14:15	A97C5EC0
pcportablenicolargo.key	916	717	Fichier KEY	04/10/2018 14:15	2F68F04C
ta.key	636	384	Fichier KEY	04/10/2018 14:15	59D64037

CERTIFICATS DE CONNEXION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