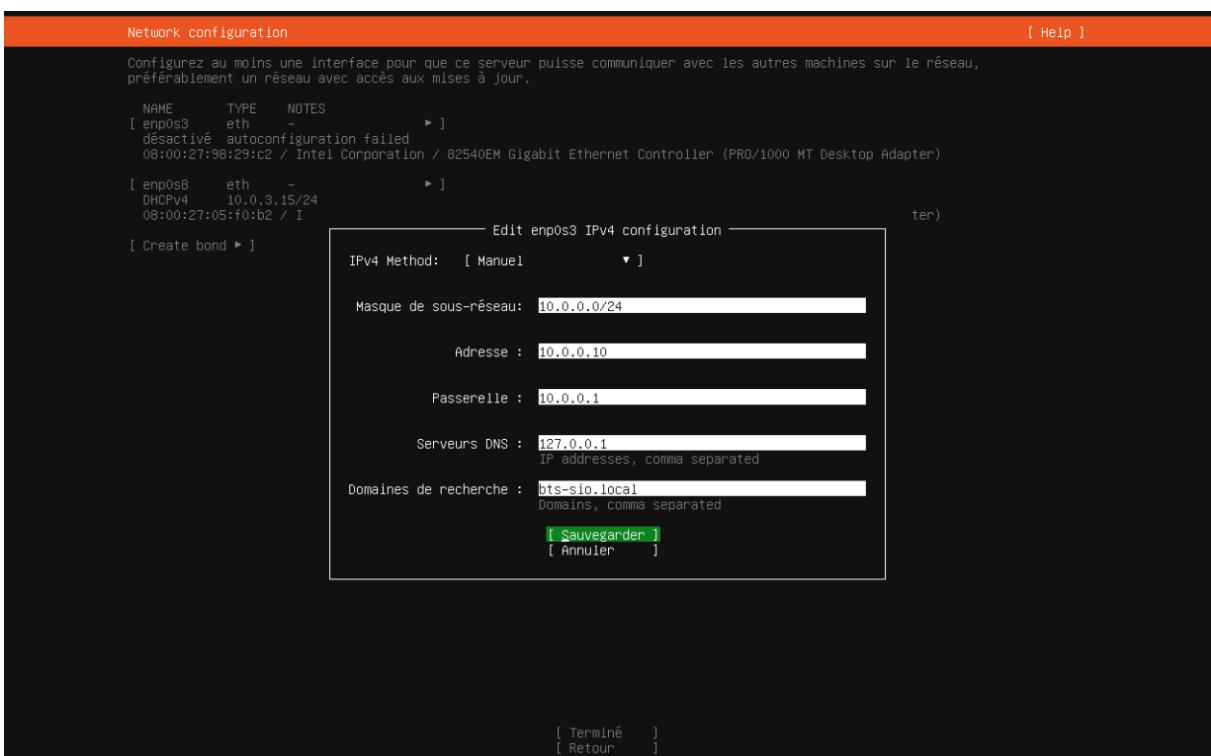
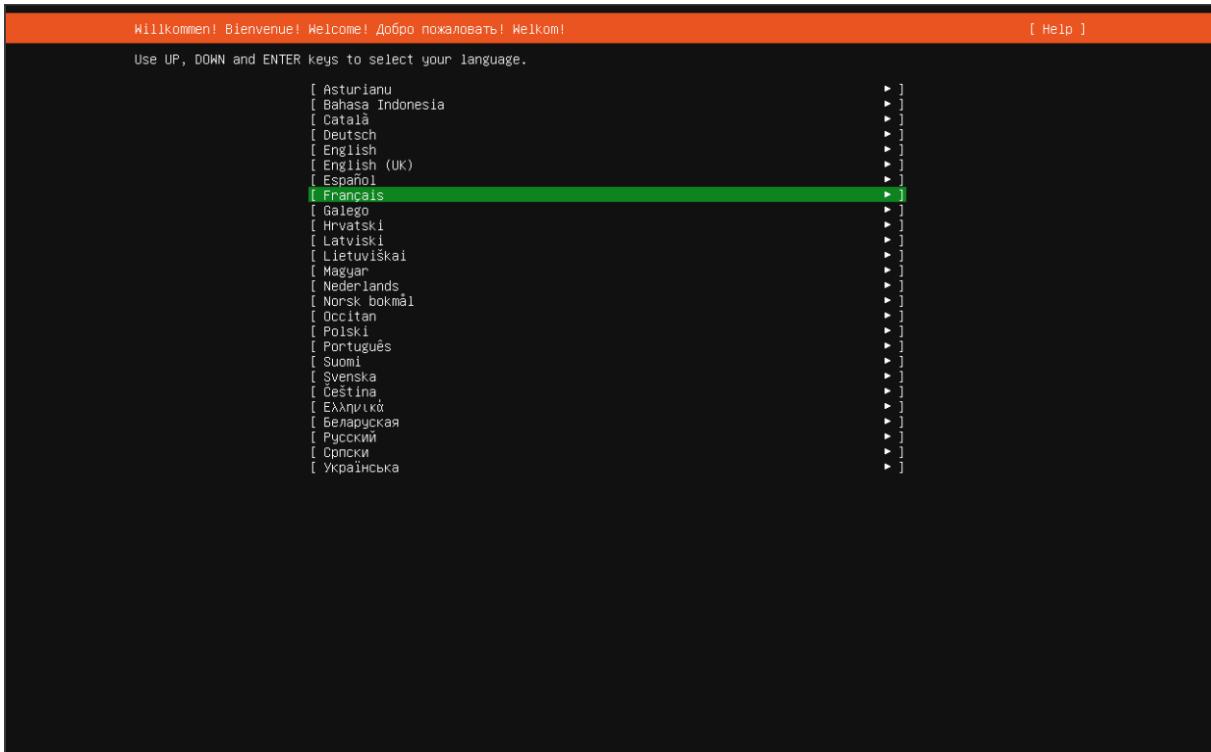
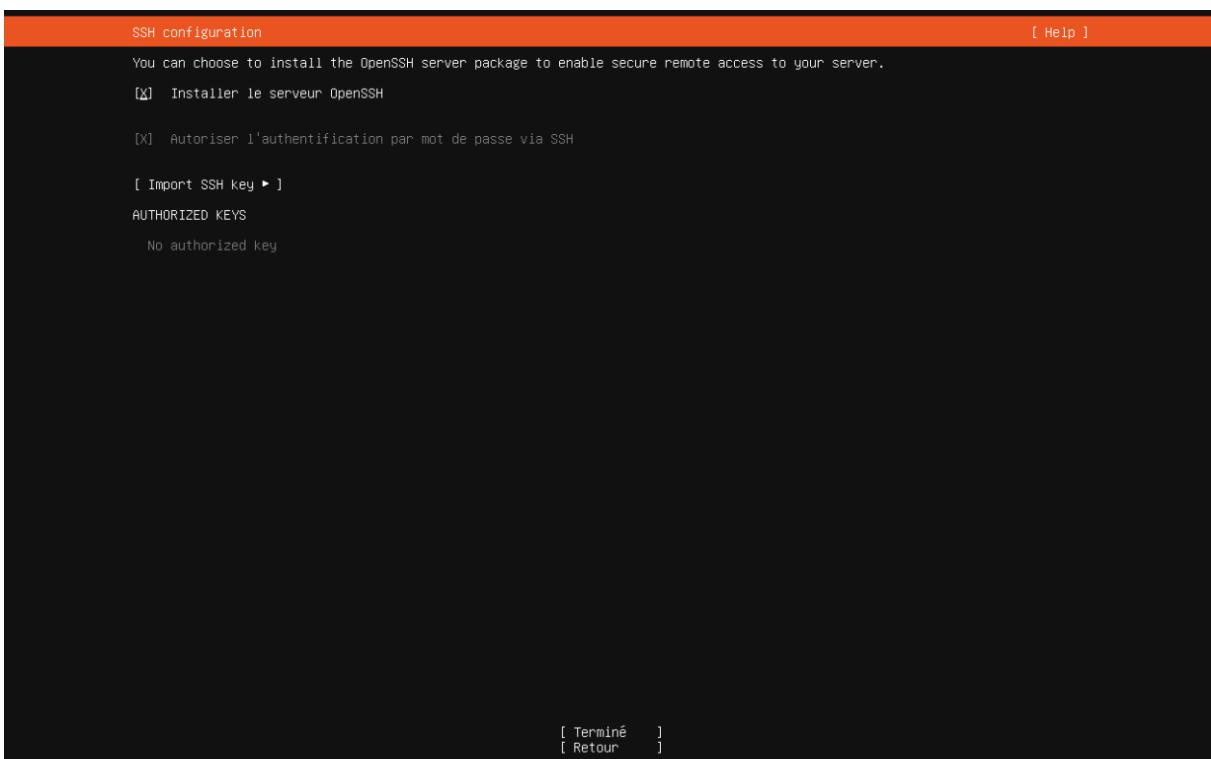
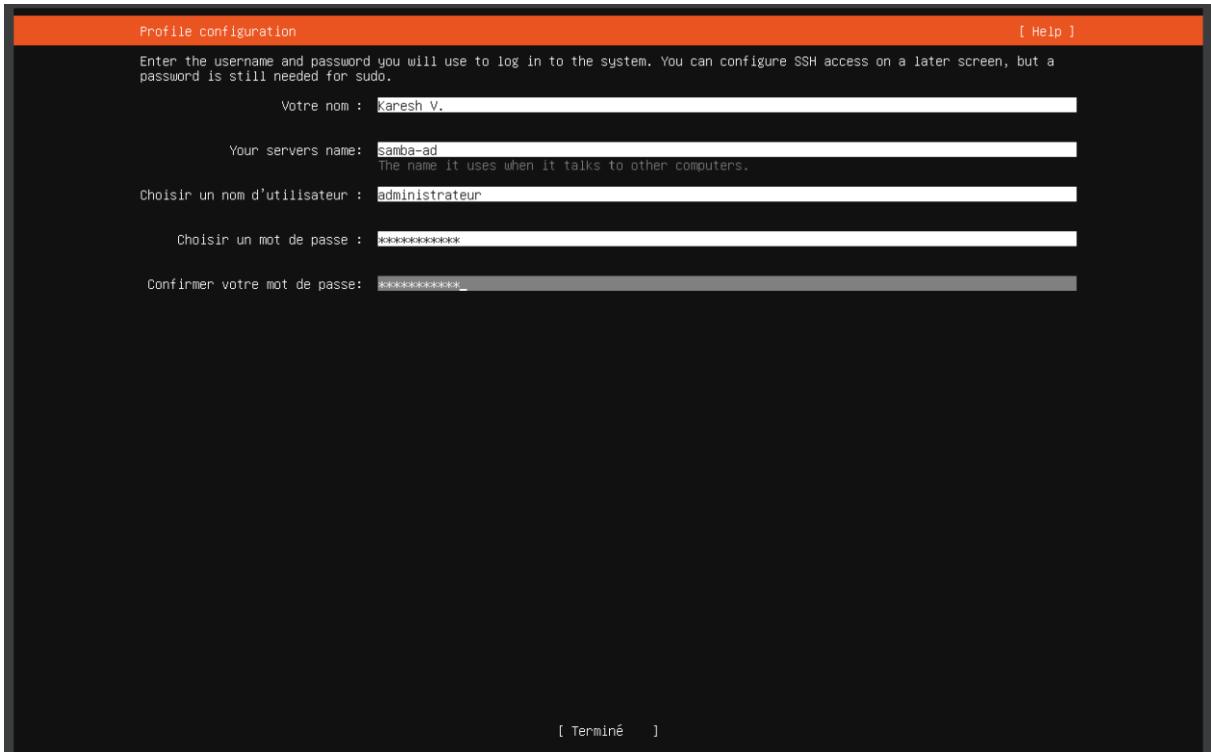


SAMBA





```

<14> Jun  5 20:43:41 cloud-init: 256 SHA256:F2VDoJecTHmySkTydhI0C9W5N1x1IniYxAvJkLxReoQ root@samba-ad (ED25519)
<14> Jun  5 20:43:41 cloud-init: 3072 SHA256:UQPbq/+eKwtJ1V/psA9CSASUC/ACIpW/NJ2SEHFcyEA root@samba-ad (RSA)
<14> Jun  5 20:43:41 cloud-init: -----END SSH HOST KEY FINGERPRINTS-----
<14> Jun  5 20:43:41 cloud-init: #####
-----BEGIN SSH HOST KEY KEYS-----
ecdsa-sha2-nistp256 AAAE2VjZHMhLXNoYTItbm1zdHdAVNTyAAAIBmLz0HqyNTyAAABBBG2/vMaVlXH-DPIGk3RXG5wauuhq+U+HjTW7tz5tCGfdfc50FIPBZuPbvMf1p9CvEtcfrcFq0E6cuB243tvLqo=
root@samba-ad
ssh-ed25519 AAAAC3NzaC1lZD1TE5AAAAIJ/RDp/kkUS+f390zBD7q0lurPa21a0wsdZ0pV4+03AT root@samba-ad
ssh-rsa AAAAB3NzaC1yc2EAAADQ0BAAABgQC6LEXq3q0fPVDEUAgVcJz0Hrm2XvnTFPhsLV0q0L+udk4Shu+GoVqqp1G9kV5fsGarz1kS+r1bI+McnzDNaCbxh6JRW0R1YnWa65tQg2zB8hFfvPywxupPuCXnhsnTPw01uanBruw6xDuJ+tuwPsJcTL4PjX3pbmp9Huq+4BTCPJkGbqDe7E28ennb9c07r+F+4XQYxFvdA/BVu52n7nYJ4Kxt0b1KDCHLMpDe4913Ly1ZCA2FT6x0uB9NNNBep/3bbk8hxMuLmhwu6FQKM7m0quuqft05Krcie0@uvw01sW=+2ibQ0xNgBoohyRgpMsJ+TvBIE0puLX075TsFxzeocoqjlvPFXJU/y4LhIeLHcvbbq3HQtihajG0qklz4gahwytPkAvEiTzXGgd0JBNbNvfo3QERhBf0m9+2LfC74r8
-----END SSH HOST KEY KEYS-----
[ 65.135509] cloud-init[1071]: Cloud-init v. 24.4-0ubuntu1~24.04.2 finished at Thu, 05 Jun 2025 20:43:41 +0000. Datasource DataSourceNone. Up 65.04 seconds

samba-ad login: administrateur
Password:
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.8.0-53-generic x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/pro

System information as of Sun Feb 16 21:00:26 UTC 2025

 System load: 1.15    Processes:          34
 Usage of /home: unknown   Users logged in: 0
 Memory usage:  5%    IPv4 address for eth0: 10.10.10.2
 Swap usage:   0% 

La maintenance de sécurité étendue pour Applications n'est pas activée.

0 mise à jour peut être appliquée immédiatement.

Activez ESM Apps pour recevoir des futures mises à jour de sécurité supplémentaires.
Visitez https://ubuntu.com/esm ou exécutez : sudo pro status

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

administrateur@samba-ad:~$ _

```

Objectif final pour la VM SAMBA-AD :

1. Activer les mises à jour si tu veux (Internet requis)
2. Installer tous les paquets nécessaires pour Samba Active Directory
3. Promouvoir le serveur en tant que contrôleur de domaine
4. Vérifier les services (DNS, LDAP, Kerberos)
5. Préparer la connexion LDAP pour Nextcloud

```
sudo nano /etc/sysctl.d/99-disable-ipv6.conf
```

Pour installer les paquet avec internet en désactivant ipv6

```
GNU nano 7.2                               /etc/sysctl.d/99-disable-ipv6.conf *

net.ipv6.conf.all.disable_ipv6 = 1
net.ipv6.conf.default.disable_ipv6 = 1
net.ipv6.conf.lo.disable_ipv6 = 1

^G Help      ^O Write Out    ^W Where Is     ^K Cut          ^T Execute      ^C Location    ^U Undo        M-U Undo
^X Exit      ^R Read File   ^N Replace     ^U Paste        ^J Justify     ^G Go To Line  M-B Redo      M-A Set Mark
                                         ^D Go To Line  M-B Redo      M-G Copy       M-L To Bracket M-O Where Was  M-K Next
```

Puis applique :

```
administrateur@samba-ad:~$ sudo sysctl -p /etc/sysctl.d/99-disable-ipv6.conf
net.ipv6.conf.all.disable_ipv6 = 1
net.ipv6.conf.default.disable_ipv6 = 1
net.ipv6.conf.lo.disable_ipv6 = 1
administrateur@samba-ad:~$
```

3. Redémarre le réseau :

```
sudo systemctl restart systemd-networkd
```

```
administrateur@samba-ad:~$ ip route
default via 10.0.0.1 dev enp0s3 proto static
default via 10.0.3.2 dev enp0s8 proto dhcp src 10.0.3.15 metric 100
10.0.0.0/24 dev enp0s3 proto kernel scope link src 10.0.0.10
10.0.3.0/24 dev enp0s8 proto kernel scope link src 10.0.3.15 metric 100
10.0.3.2 dev enp0s8 proto dhcp scope link src 10.0.3.15 metric 100
192.168.1.254 via 10.0.3.2 dev enp0s8 proto dhcp src 10.0.3.15 metric 100
192.172.72.2 via 10.0.3.2 dev enp0s8 proto dhcp src 10.0.3.15 metric 100
administrateur@samba-ad:~$
```

✖ Le souci

default via 10.0.0.1 dev enp0s3 proto static

default via 10.0.3.2 dev enp0s8 proto dhcp

👉 Tu as deux routes par défaut :

- 10.0.0.1 via enp0s3 (réseau interne, pas d'Internet)
- 10.0.3.2 via enp0s8 (réseau NAT, à Internet)
- 👉 **Supprimer la mauvaise route (temporairement)**

sudo ip route del default via 10.0.0.1 dev enp0s3

```
administrateur@samba-ad:~$ ip route
default via 10.0.0.1 dev enp0s3 proto static
default via 10.0.3.2 dev enp0s8 proto dhcp src 10.0.3.15 metric 100
10.0.0.0/24 dev enp0s3 proto kernel scope link src 10.0.0.10
10.0.3.0/24 dev enp0s8 proto kernel scope link src 10.0.3.15 metric 100
10.0.3.2 dev enp0s8 proto dhcp scope link src 10.0.3.15 metric 100
192.168.1.254 via 10.0.3.2 dev enp0s8 proto dhcp src 10.0.3.15 metric 100
192.172.72.2 via 10.0.3.2 dev enp0s8 proto dhcp src 10.0.3.15 metric 100
administrateur@samba-ad:~$ sudo ip route del default via 10.0.0.1 dev enp0s3
administrateur@samba-ad:~$ ping 8.8.8.8 -c 3
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=118 time=8.76 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=118 time=21.2 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=118 time=6.09 ms

--- 8.8.8.8 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2002ms
rtt min/avg/max/mdev = 6.086/12.020/21.217/6.593 ms
administrateur@samba-ad:~$
```

sudo apt update

```
Réception de :42 http://archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [4
Réception de :43 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components
Réception de :44 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata
Réception de :45 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Packages [39,2
Réception de :46 http://archive.ubuntu.com/ubuntu noble-backports/main Translation-en [8 676
Réception de :47 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7 0
Réception de :48 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata
Réception de :49 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Component
Réception de :50 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Met
Réception de :51 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [2
Réception de :52 http://archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [1
Réception de :53 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components
Réception de :54 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metad
Réception de :55 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Component
Réception de :56 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Met
13,6 Mo réceptionnés en 6s (2 366 ko/s)
Lecture des listes de paquets... Fait
Construction de l'arbre des dépendances... Fait
Lecture des informations d'état... Fait
142 paquets peuvent être mis à jour. Exécutez « apt list --upgradable » pour les voir.
administrateur@samba-ad:~$
```

Active tous les dépôts

sudo add-apt-repository universe

sudo add-apt-repository multiverse

sudo add-apt-repository restricted

```
administrateur@samba-ad:~$ sudo add-apt-repository univers
Unable to handle repository shortcut 'univers'
administrateur@samba-ad:~$ sudo add-apt-repository universe
Adding component(s) 'universe' to all repositories.
Press [ENTER] to continue or Ctrl-c to cancel.
Atteint :1 http://security.ubuntu.com/ubuntu noble-security InRelease
Atteint :2 http://archive.ubuntu.com/ubuntu noble InRelease
Atteint :3 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Atteint :4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Lecture des listes de paquets... Fait
administrateur@samba-ad:~$ sudo add-apt-repository multiverse
Adding component(s) 'multiverse' to all repositories.
Press [ENTER] to continue or Ctrl-c to cancel.
Atteint :1 http://archive.ubuntu.com/ubuntu noble InRelease
Atteint :2 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Atteint :3 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Atteint :4 http://security.ubuntu.com/ubuntu noble-security InRelease
Lecture des listes de paquets... Fait
administrateur@samba-ad:~$ sudo add-apt-repository restricted
Adding component(s) 'restricted' to all repositories.
Press [ENTER] to continue or Ctrl-c to cancel.
Atteint :1 http://archive.ubuntu.com/ubuntu noble InRelease
Atteint :2 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Atteint :3 http://security.ubuntu.com/ubuntu noble-security InRelease
Atteint :4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Lecture des listes de paquets... Fait
administrateur@samba-ad:~$ _
```

sudo apt update

Vérifie manuellement si les paquets sont visibles

```
administrateur@samba-ad:~$ apt policy winbind
winbind:
  Installé : (aucun)
  Candidat : 2:4.19.5+dfsg-4ubuntu9
  Table de version :
    2:4.19.5+dfsg-4ubuntu9 500
      500 http://archive.ubuntu.com/ubuntu/noble/main amd64 Packages
administrateur@samba-ad:~$ apt policy dnsutils
dnsutils:
  Installé : (aucun)
  Candidat : 1:9.18.30-0ubuntu0.24.04.2
  Table de version :
    1:9.18.30-0ubuntu0.24.04.2 500
      500 http://archive.ubuntu.com/ubuntu/noble-updates/universe amd64 Packages
      500 http://security.ubuntu.com/ubuntu/noble-security/universe amd64 Packages
    1:9.18.24-0ubuntu5 500
      500 http://archive.ubuntu.com/ubuntu/noble/universe amd64 Packages
administrateur@samba-ad:~$
```

Puis

```
sudo apt install -y samba winbind dnsutils
```

➡️ Étape suivante : provisionner le domaine Active Directory

Tu peux maintenant lancer la commande :

```
sudo samba-tool domain provision --use-rfc2307 --interactive
```

Le **DNS forwarder** est le serveur DNS externe auquel ton serveur Samba redirigera les requêtes **qu'il ne connaît pas lui-même** (ex. : google.com, ubuntu.com).

Tape cette commande avant de relancer samba-tool domain provision :

```
ERROR(<class 'samba.provision.ProvisioningError'>): Provision failed - ProvisioningError: guess_names: 'realm =' was not specified in supplied /etc/samba/smb.conf.  
administrateur@samba-ad:~$ sudo rm /etc/samba/smb.conf  
administrateur@samba-ad:~$ _
```

Puis



Et cette fois :

- **Realm** : `BTS-S10.LOCAL`
- **Domain** : `BTS-S10`
- **Server Role** : `active directory domain controller`
- **DNS backend** : `SAMBA_INTERNAL`
- **DNS forwarder** : `8.8.8.8` ou `10.0.0.1` selon ton réseau
- **Mot de passe** : fort et cohérent

```
administrateur@samba-ad:~$ cat /etc/samba/smb.conf
# Global parameters
[global]
    dns forwarder = 8.8.8.8
    netbios name = SAMBA-AD
    realm = BTS-SIO.LOCAL
    server role = active directory domain controller
    workgroup = BTS-SIO
    idmap_ldb:use rfc2307 = yes

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

[netlogon]
    path = /var/lib/samba/sysvol/bts-sio.local/scripts
    read only = No
administrateur@samba-ad:~$ _
```

Appliquer les bonnes permissions sur les fichiers Samba

```
sudo samba-tool ntacl sysvolreset
```

```
administrateur@samba-ad:~$ cat /etc/samba/smb.conf
# Global parameters
[global]
    dns forwarder = 8.8.8.8
    netbios name = SAMBA-AD
    realm = BTS-SIO.LOCAL
    server role = active directory domain controller
    workgroup = BTS-SIO
    idmap_ldb:use rfc2307 = yes

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

[netlogon]
    path = /var/lib/samba/sysvol/bts-sio.local/scripts
    read only = No
administrateur@samba-ad:~$ sudo samba-tool ntacl sysvolreset
administrateur@samba-ad:~$ sudo systemctl restart samba-ad-dc
administrateur@samba-ad:~$ sudo systemctl enable samba-ad-dc
Synchronizing state of samba-ad-dc.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable samba-ad-dc
administrateur@samba-ad:~$
```

3. Démarrer et activer les services nécessaires :

```
sudo systemctl restart samba-ad-dc
```

```
sudo systemctl enable samba-ad-dc
```

```
administrateur@samba-ad:~$ cat /etc/samba/smb.conf
# Global parameters
[global]
    dns forwarder = 8.8.8.8
    netbios name = SAMBA-AD
    realm = BTS-SIO.LOCAL
    server role = active directory domain controller
    workgroup = BTS-SIO
    idmap_ldb:use rfc2307 = yes

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

[netlogon]
    path = /var/lib/samba/sysvol/bts-sio.local/scripts
    read only = No
administrateur@samba-ad:~$ sudo samba-tool ntacl sysvolreset
administrateur@samba-ad:~$ sudo systemctl restart samba-ad-dc
administrateur@samba-ad:~$ sudo systemctl enable samba-ad-dc
Synchronizing state of samba-ad-dc.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable samba-ad-dc
administrateur@samba-ad:~$
```

4. Vérifier que Samba fonctionne correctement :

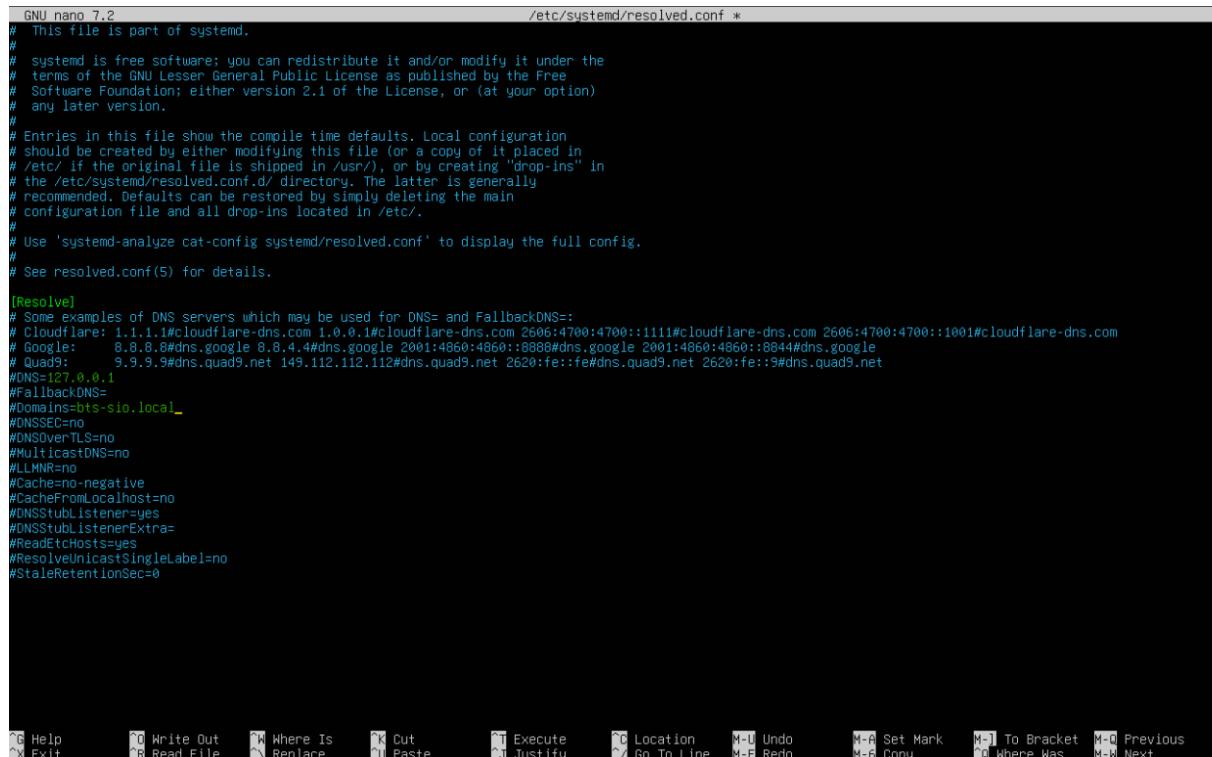
```
sudo samba-tool domain level show
```

```
administrateur@samba-ad:~$ sudo samba-tool domain level show
Domain and forest function level for domain 'DC=bts-sio,DC=local'

Forest function level: (Windows) 2008 R2
Domain function level: (Windows) 2008 R2
Lowest function level of a DC: (Windows) 2008 R2
administrateur@samba-ad:~$ _
```

Forcer l'utilisation de 127.0.0.1 comme DNS local, car c'est Samba qui héberge le DNS du domaine :

sudo nano /etc/systemd/resolved.conf



```
GNU nano 7.2                               /etc/systemd/resolved.conf *

# This file is part of systemd.
#
# systemd is free software; you can redistribute it and/or modify it under the
# terms of the GNU Lesser General Public License as published by the Free
# Software Foundation; either version 2.1 of the License, or (at your option)
# any later version.
#
# Entries in this file show the compile time defaults. Local configuration
# should be created by either modifying this file (or a copy of it placed in
# /etc/ if the original file is shipped in /usr/), or by creating "drop-ins" in
# the /etc/systemd/resolved.conf.d/ directory. The latter is generally
# recommended. Defaults can be restored by simply deleting the main
# configuration file and all drop-ins located in /etc/.
#
# Use 'systemctl-analyze cat-config systemd/resolved.conf' to display the full config.
# See resolved.conf(5) for details.

[Resolve]
# Some examples of DNS servers which may be used for DNS= and FallbackDNS=:
# Cloudflare: 1.1.1.1#cloudflare-dns.com 1.0.0.1#cloudflare-dns.com 2606:4700:4700::1001#cloudflare-dns.com
# Google:     8.8.8.8#dns.google 8.8.4.4#dns.google 2001:4860:4860::8888#dns.google 2001:4860:4860::8844#dns.google
# Quad9:      9.9.9.9#dns.quad9.net 149.112.112.112#dns.quad9.net 2620:fe::fe#dns.quad9.net 2620:fe::9#dns.quad9.net
#DNS=127.0.0.1
#FallbackDNS=
#Domains=bts-sio.local_
#DNSSEC=no
#DNSOverTLS=no
#MulticastDNS=no
#LLMNR=no
#Cache=no-negative
#CacheFromlocalhost=no
#DNSSubListener=yes
#DNSSubListenerExtra=
#ReadEtchHosts=yes
#ResolveUnicastSingleLabel=no
#StaleRetentionSec=0

G Help      W Write Out   W Where Is   C Cut          E Execute   C Location   M-U Undo   M-A Set Mark   M-T To Bracket   M-Q Previous
X Exit      R Read File   R Replace   U Paste        J Justify   G Go To Line   M-B Redo   M-C Copy       M-W Where Was   M-V Next
```

1. Modifie directement /etc/resolv.conf :

sudo nano /etc/resolv.conf



```
GNU nano 7.2
nameserver 127.0.0.1
search bts-sio.local_
```

Sauvegarde (Ctrl + O, Entrée), puis **quitte** (Ctrl + X).

Si tu vois un lien vers /run/systemd/resolve/..., fais cette commande pour écraser :

```
sudo rm /etc/resolv.conf
```

```
sudo bash -c 'echo -e "nameserver 127.0.0.1\nsearch bts-sio.local" > /etc/resolv.conf'
```

```
administrateur@samba-ad:~$ ls -l /etc/resolv.conf
lrwxrwxrwx 1 root root 39 févr. 16 20:58 /etc/resolv.conf -> ../../run/systemd/resolve/stub-resolv.conf
administrateur@samba-ad:~$ _
```

```
administrateur@samba-ad:~$ sudo rm /etc/resolv.conf
administrateur@samba-ad:~$ sudo bash -c "echo -e \"nameserver 127.0.0.1\nsearch bts-sio.local\" > /etc/resolv.conf"
nameserver
administrateur@samba-ad:~$ _
```

Et pour tester la résolution DNS locale :

```
host -t SRV _ldap._tcp.bts-sio.local
```

```
host -t SRV _kerberos._udp.bts-sio.local
```

```
administrateur@samba-ad:~$ sudo rm /etc/resolv.conf
administrateur@samba-ad:~$ echo -e "nameserver 127.0.0.1\nsearch ad-innov.local" | sudo tee /etc/resolv.conf
nameserver 127.0.0.1
search ad-innov.local
administrateur@samba-ad:~$ sudo systemctl start samba-ad-dc
administrateur@samba-ad:~$ sudo systemctl enable samba-ad-dc
Synchronizing state of samba-ad-dc.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable samba-ad-dc
administrateur@samba-ad:~$ host -t SRV _ldap._tcp.bts-sio.local
_ldap._tcp.bts-sio.local has no SRV record
administrateur@samba-ad:~$ host -t SRV _kerberos._udp.bts-sio.local
_kerberos._udp.bts-sio.local has no SRV record
administrateur@samba-ad:~$ host -t SRV _ldap._tcp.ad-innov.local
_ldap._tcp.ad-innov.local has SRV record 0 100 389 samba-ad.ad-innov.local.
administrateur@samba-ad:~$ host -t SRV _kerberos._udp.ad-innov.local
_kerberos._udp.ad-innov.local has SRV record 0 100 88 samba-ad.ad-innov.local.
administrateur@samba-ad:~$ _
```

```
administrateur@samba-ad:~$ sudo samba-tool ou create "OU=Direction"
Added ou "OU=Direction,DC=ad-innov,DC=local"
administrateur@samba-ad:~$ sudo samba-tool ou create "OU=RH"
Added ou "OU=RH,DC=ad-innov,DC=local"
administrateur@samba-ad:~$ sudo samba-tool ou create "OU=Informatique"
Added ou "OU=Informatique,DC=ad-innov,DC=local"
administrateur@samba-ad:~$ sudo samba-tool ou create "OU=Comptabilité"
Added ou "OU=Comptabilité,DC=ad-innov,DC=local"
administrateur@samba-ad:~$ sudo samba-tool ou create "OU=Stagiaire"
Added ou "OU=Stagiaire,DC=ad-innov,DC=local"
administrateur@samba-ad:~$
```

```
administrateur@samba-ad:~$ sudo samba-tool ou create "OU=Direction"
Added ou "OU=Direction,DC=ad-innov,DC=local"
administrateur@samba-ad:~$ sudo samba-tool ou create "OU=RH"
Added ou "OU=RH,DC=ad-innov,DC=local"
administrateur@samba-ad:~$ sudo samba-tool ou create "OU=Informatique"
Added ou "OU=Informatique,DC=ad-innov,DC=local"
administrateur@samba-ad:~$ sudo samba-tool ou create "OU=Comptabilité"
Added ou "OU=Comptabilité,DC=ad-innov,DC=local"
administrateur@samba-ad:~$ sudo samba-tool ou create "OU=Stagiaire"
Added ou "OU=Stagiaire,DC=ad-innov,DC=local"
administrateur@samba-ad:~$ sudo samba-tool group add direction
Added group direction
administrateur@samba-ad:~$ sudo samba-tool group add rh
Added group rh
administrateur@samba-ad:~$ sudo samba-tool group add informatique
Added group informatique
administrateur@samba-ad:~$ sudo samba-tool group add comptabilite
Added group comptabilite
administrateur@samba-ad:~$ sudo samba-tool group add stagiaire
Added group stagiaire
administrateur@samba-ad:~$ sudo samba-tool user create directeur.directrice "Jayson2003!" --given-name="Directeur" --surname="Général"
> "C"
administrateur@samba-ad:~$ sudo samba-tool user create directeur.directrice "Jayson2003!" --given-name="Directeur" --surname="Général"
User 'directeur.directrice' added successfully
administrateur@samba-ad:~$ sudo samba-tool group addmembers direction directeur.directrice
Added members to group direction
administrateur@samba-ad:~$ sudo samba-tool user create julie.rh "Jayson2003!" --given-name="Julie" --surname="Ressource"
User 'julie.rh' added successfully
administrateur@samba-ad:~$ sudo samba-tool group addmembers rh julie.rh
Added members to group rh
administrateur@samba-ad:~$ sudo samba-tool user create thomas.it "Jayson2003!" --given-name="Thomas" --surname="Informatique"
User 'thomas.it' added successfully
administrateur@samba-ad:~$ sudo samba-tool group addmembers it thomas.it
ERROR: Failed to add members ['thomas.it'] to group 'it' - Unable to find group 'it'
administrateur@samba-ad:~$ sudo samba-tool group addmembers informatique thomas.it
Added members to group informatique
administrateur@samba-ad:~$ sudo samba-tool user create claire.compte "Jayson2003!" --given-name="Claire" --surname="Compta"
User 'claire.compte' added successfully
administrateur@samba-ad:~$ sudo samba-tool group addmembers comptabilite claire.compte
Added members to group comptabilite
administrateur@samba-ad:~$ sudo samba-tool user create leo.stage "Jayson2003!" --given-name="Léo" --surname="Stage"
User 'leo.stage' added successfully
administrateur@samba-ad:~$ sudo samba-tool group addmembers stagiaire leo.stage
Added members to group stagiaire
administrateur@samba-ad:~$
```

```
administrateur@samba-ad:~$ sudo samba-tool user list
thomas.it
julie.rh
Guest
claire.compte
Administrator
krbtgt
leo.stage
directeur.directrice
administrateur@samba-ad:~$
```

```
administrateur@samba-ad:~$ sudo samba-tool group listmembers Informatique
thomas.it
administrateur@samba-ad:~$
```

Tester l'authentification LDAP en local

Installe l'outil ldap-utils si ce n'est pas déjà fait :

```
administrateur@samba-ad:~$ sudo apt install ldap-utils
Lecture des listes de paquets... Fait
Construction de l'arbre des dépendances... Fait
Lecture des informations d'état... Fait
Les paquets supplémentaires suivants seront installés :
  libldap-common libldap2
Paquets suggérés :
  libsasl2-modules-gssapi-mit | libsasl2-modules-gssapi-heimdal
Les NOUVEAUX paquets suivants seront installés :
  ldap-utils
Les paquets suivants seront mis à jour :
  libldap-common libldap2
2 mis à jour, 1 nouvellement installés, 0 à enlever et 138 non mis à jour.
Il est nécessaire de prendre 390 ko dans les archives.
Après cette opération, 720 ko d'espace disque supplémentaires seront utilisés.
Souhaitez-vous continuer ? [O/n] o
Réception de :1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libldap2 amd64 2.6.7+dfsg-1~exp1ubuntu8.2 [196 kB]
Réception de :2 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 ldap-utils amd64 2.6.7+dfsg-1~exp1ubuntu8.2 [153 kB]
Réception de :3 http://archive.ubuntu.com/ubuntu noble-updates/main all libldap-common all 2.6.7+dfsg-1~exp1ubuntu8.2 [31,7 kB]
390 ko réceptionnés en 1s (466 ko/s)
(Lecture de la base de données... 88007 fichiers et répertoires déjà installés.)
Préparation du dépaquetage de .../libldap2_2.6.7+dfsg-1~exp1ubuntu8.2_amd64.deb ...
Dépaquetage de libldap2:amd64 (2.6.7+dfsg-1~exp1ubuntu8.2) sur (2.6.7+dfsg-1~exp1ubuntu8.1) ...
Sélection du paquet ldap-utils précédemment désélectionné.
Préparation du dépaquetage de .../ldap-utils_2.6.7+dfsg-1~exp1ubuntu8.2_amd64.deb ...
Dépaquetage de ldap-utils (2.6.7+dfsg-1~exp1ubuntu8.2) ...
Préparation du dépaquetage de .../libldap-common_2.6.7+dfsg-1~exp1ubuntu8.2_all.deb ...
Dépaquetage de libldap-common (2.6.7+dfsg-1~exp1ubuntu8.2) sur (2.6.7+dfsg-1~exp1ubuntu8.1) ...
Paramétrage de libldap-common (2.6.7+dfsg-1~exp1ubuntu8.2) ...
Paramétrage de libldap2:amd64 (2.6.7+dfsg-1~exp1ubuntu8.2) ...
Paramétrage de libldap-utils (2.6.7+dfsg-1~exp1ubuntu8.2) ...
Traitement des actions différencées (« triggers ») pour libc-bin (2.39-0ubuntu8.4) ...
Traitement des actions différencées (« triggers ») pour man-db (2.12.0-4build2) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

Restarting services...
systemctl restart fwupd.service samba-ad-dc.service

No containers need to be restarted.

No user sessions are running outdated binaries.

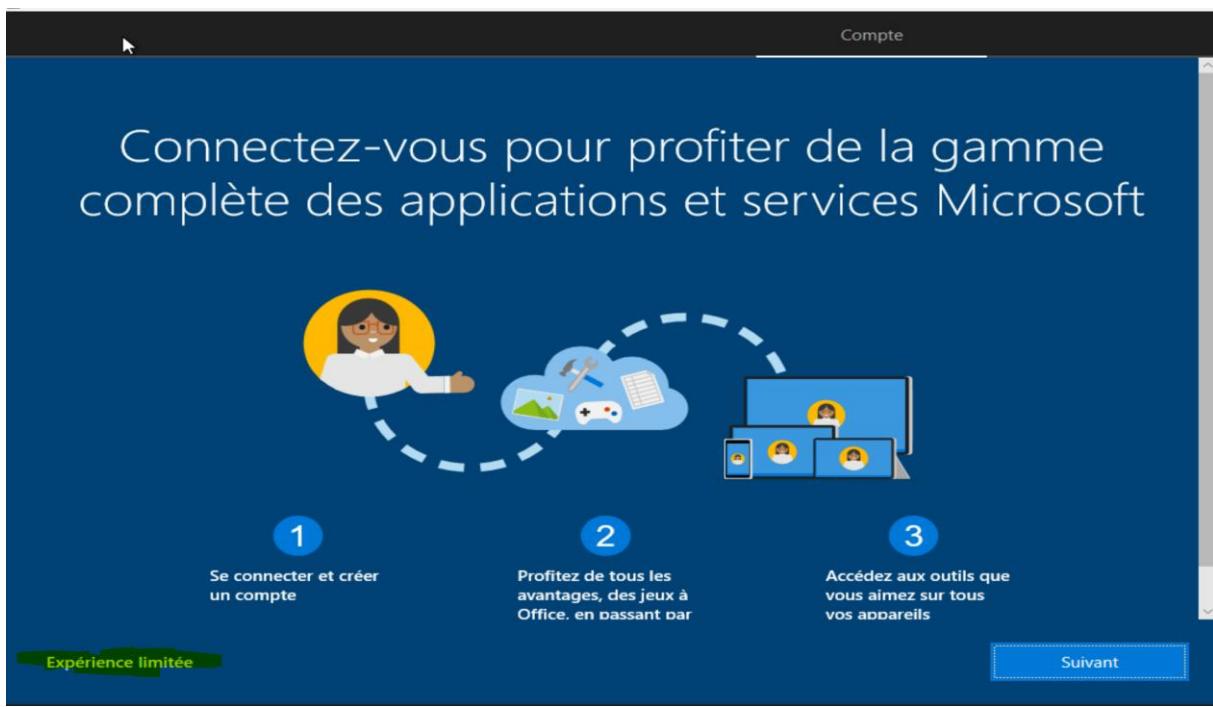
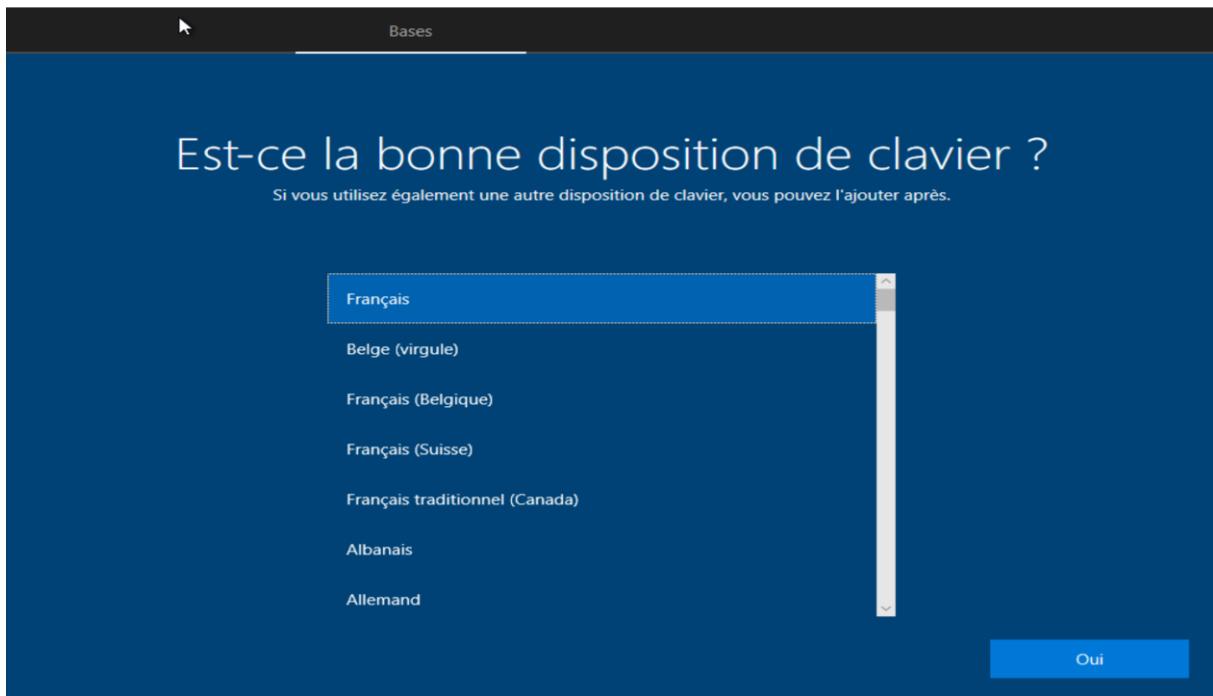
No VM guests are running outdated hypervisor (qemu) binaries on this host.
administrateur@samba-ad:~$ _
```

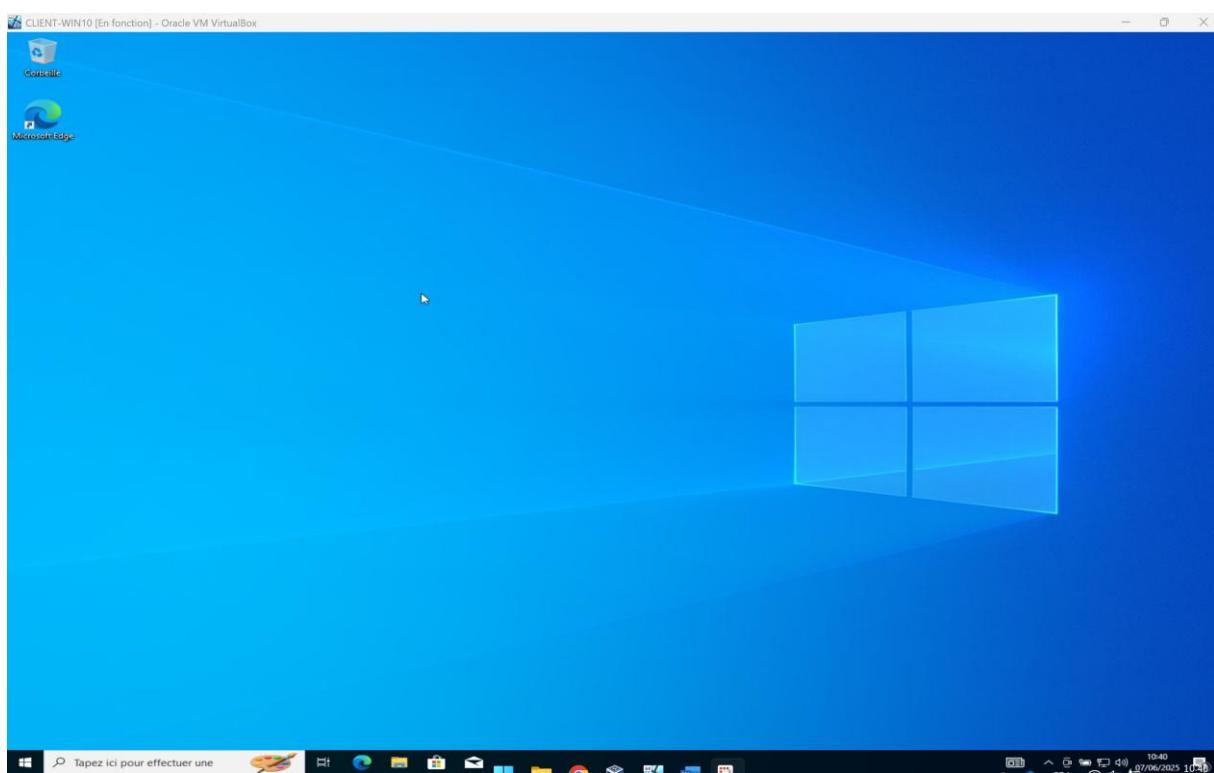
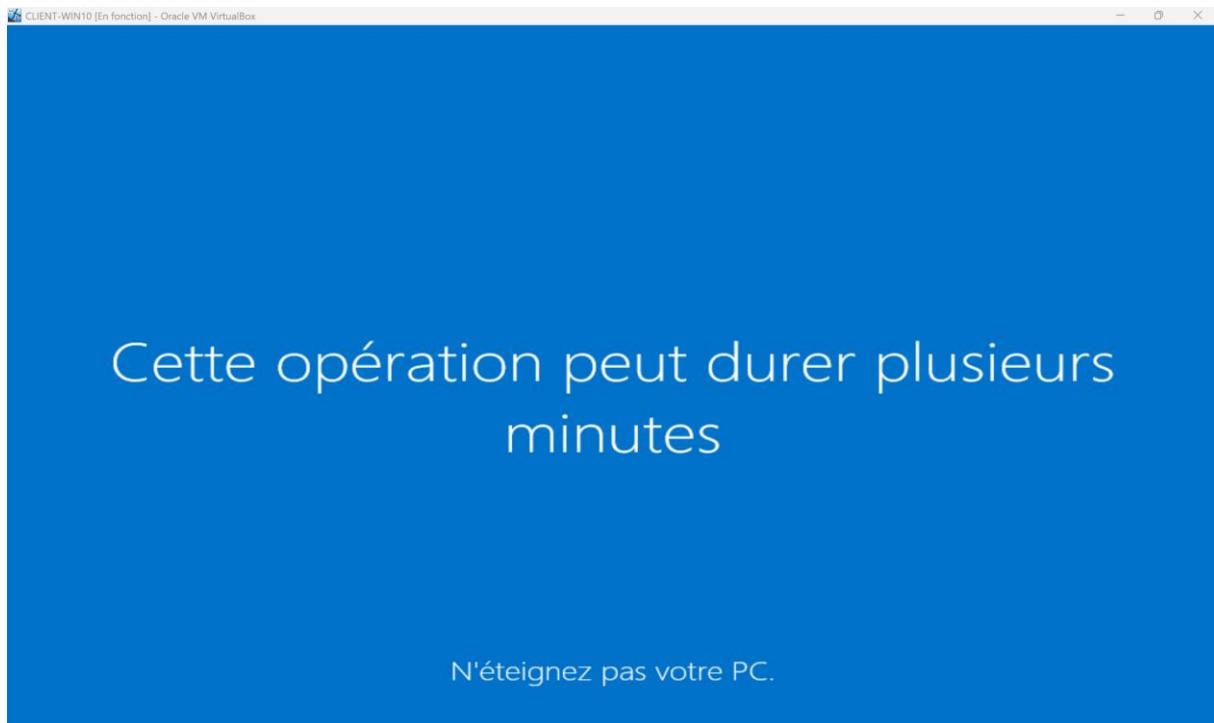
```
GNU nano 7.2                                         /etc/samba/smb.conf
# Global parameters
[global]
dns forwarder = 8.8.8.8
netbios name = SAMBA-AD
realm = AD-INNOV.LOCAL
server role = active directory domain controller
workgroup = AD-INNOV
idmap_ldap:use rfc2307 = yes
ldap server require strong auth = no

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

[netlogon]
path = /var/lib/samba/sysvol/ad-innov.local/scripts
read only = No
```

CLIENT WINDOWS 10 INSTALLATION





```

Administrator : invite de commandes
Microsoft Windows [version 10.0.19045.3803]
(c) Microsoft Corporation. Tous droits réservés.

C:\Windows\system32>ipconfig

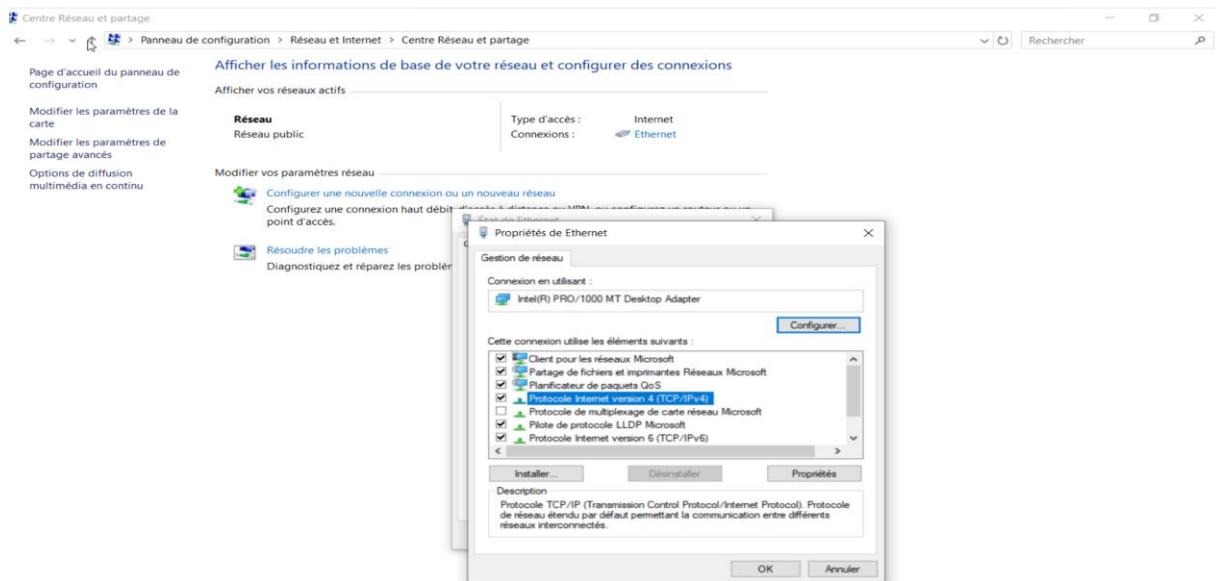
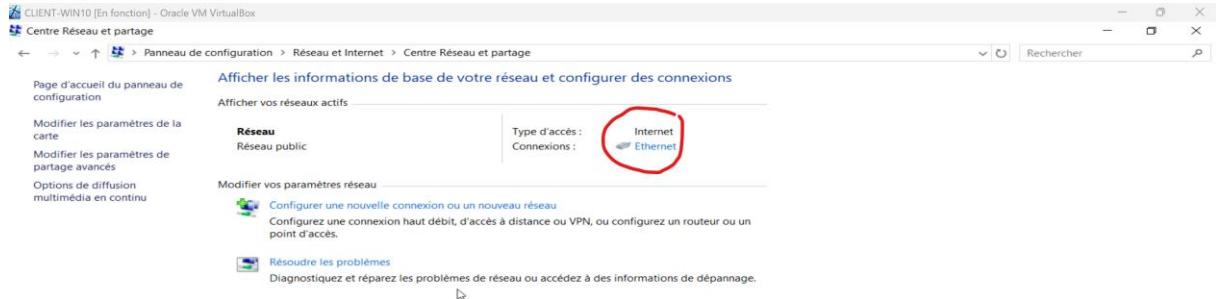
Configuration IP de Windows

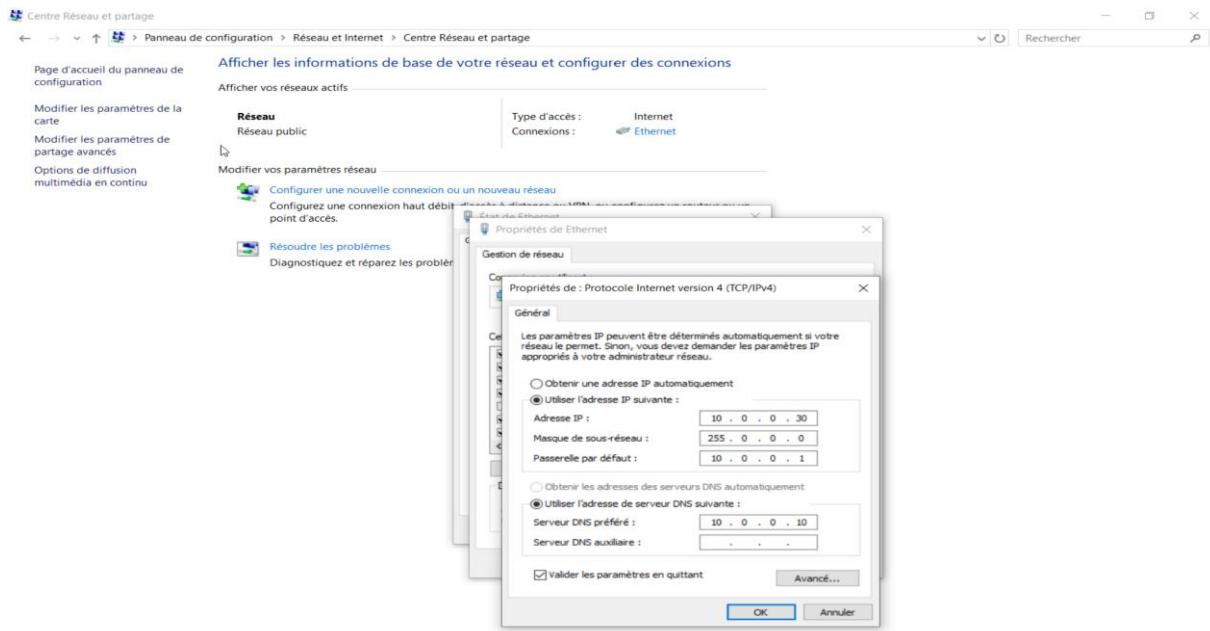
Carte Ethernet Ethernet :

Suffrage DNS propre à la connexion. . . . . 
Adresse IPv6 de liaison locale. . . . . fe80::19e:bd1d:21e5:6672%4
Adresse IPv4. . . . . 10.0.2.15
Masque de sous-réseau. . . . . 255.255.255.0
Passerelle par défaut. . . . . 10.0.2.2

C:\Windows\system32>

```





```
administrateur@samba-ad:~$ sudo samba-tool dns add 127.0.0.1 ad-innov.local ad1 A 10.0.0.10 -U administrator
WARNING: Using passwords on command line is insecure. Installing the setproctitle python module will hide these from shortly after program start.
Password for [AD-INNOV\administrator]:
Record added successfully
administrateur@samba-ad:~$
```

```
C:\ Sélection Invite de commandes
Microsoft Windows [version 10.0.19045.3803]
(c) Microsoft Corporation. Tous droits réservés.

C:\Users\LOCALADMIN>ping 10.0.0.10

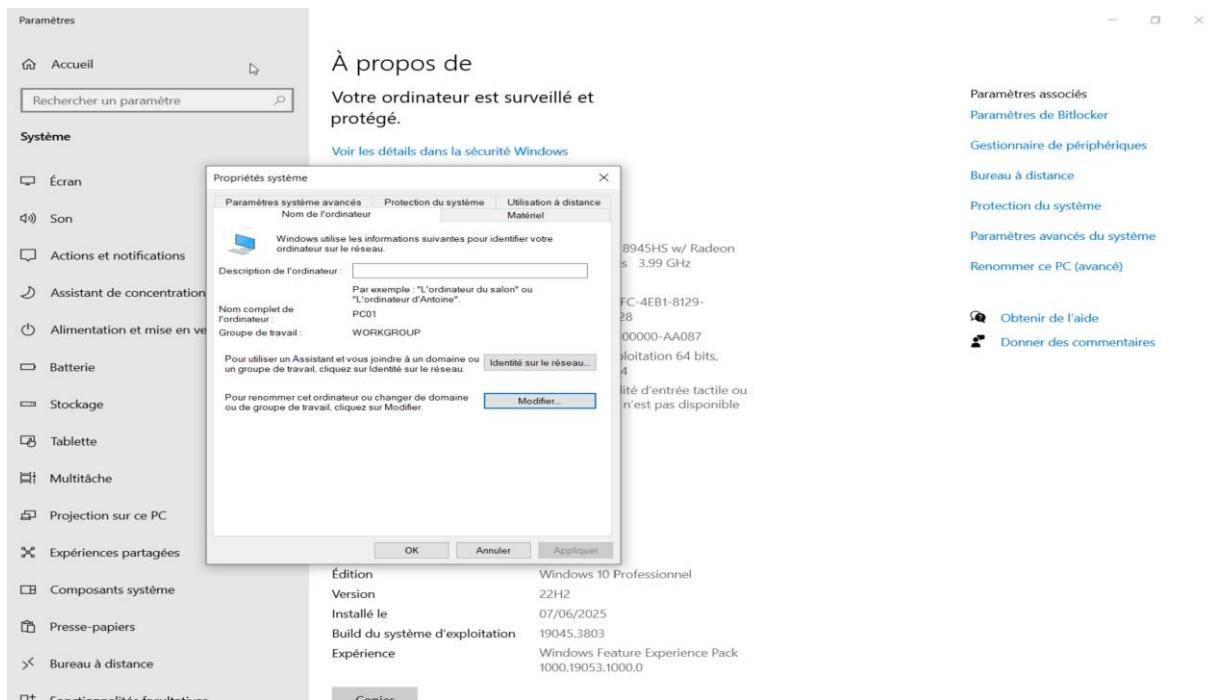
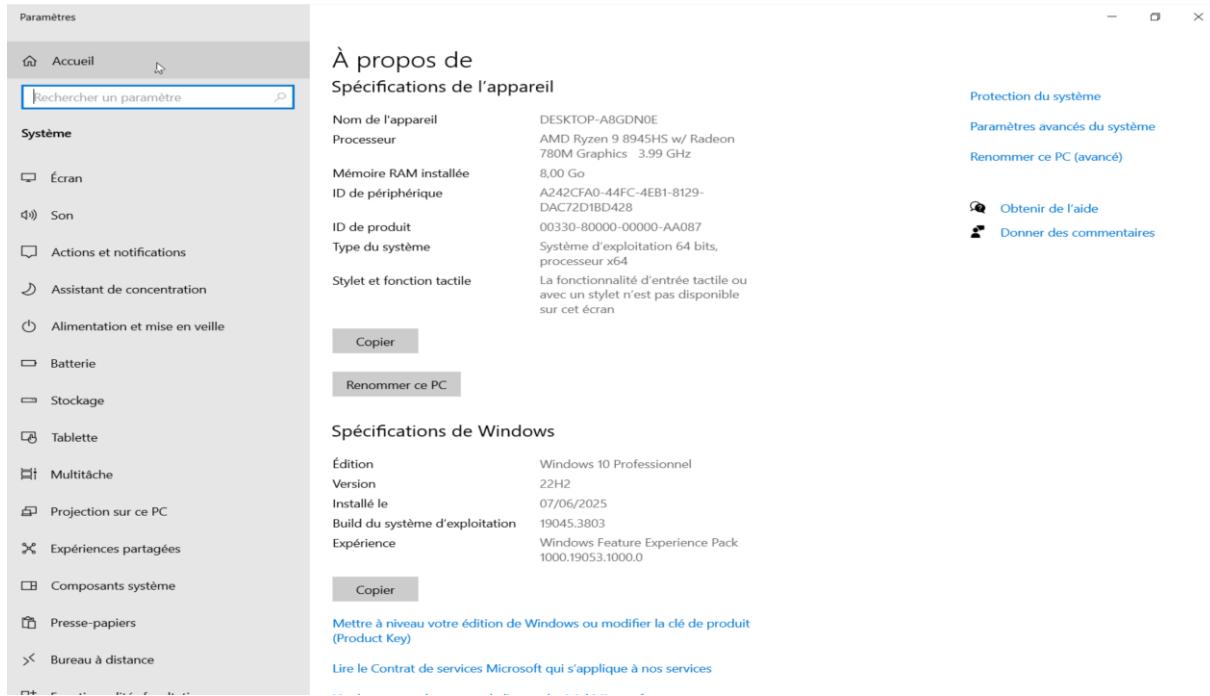
Envoi d'une requête 'Ping' 10.0.0.10 avec 32 octets de données :
Réponse de 10.0.0.10 : octets=32 temps=1 ms TTL=64
Réponse de 10.0.0.10 : octets=32 temps=1 ms TTL=64
Réponse de 10.0.0.10 : octets=32 temps=1 ms TTL=64
Réponse de 10.0.0.10 : octets=32 temps<1ms TTL=64

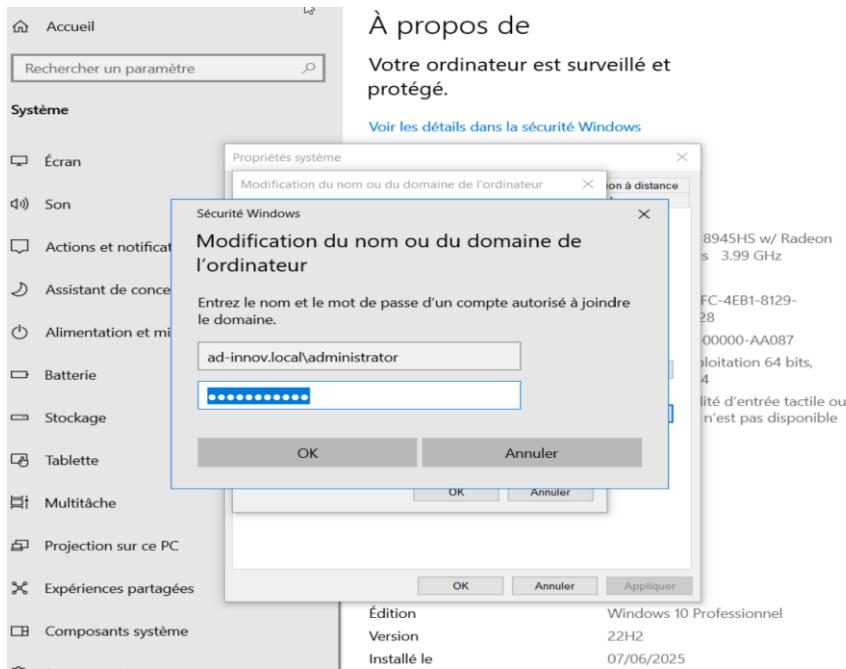
Statistiques Ping pour 10.0.0.10:
    Paquets : envoyés = 4, reçus = 4, perdus = 0 (perte 0%),
Durée approximative des boucles en millisecondes :
    Minimum = 0ms, Maximum = 1ms, Moyenne = 0ms

C:\Users\LOCALADMIN>nslookup ad1.ad-innov.local
(root) ??? unknown type 41 ???
Serveur :  UnKnown
Address:  10.0.0.10

Nom :      ad1.ad-innov.local
Address:  10.0.0.10

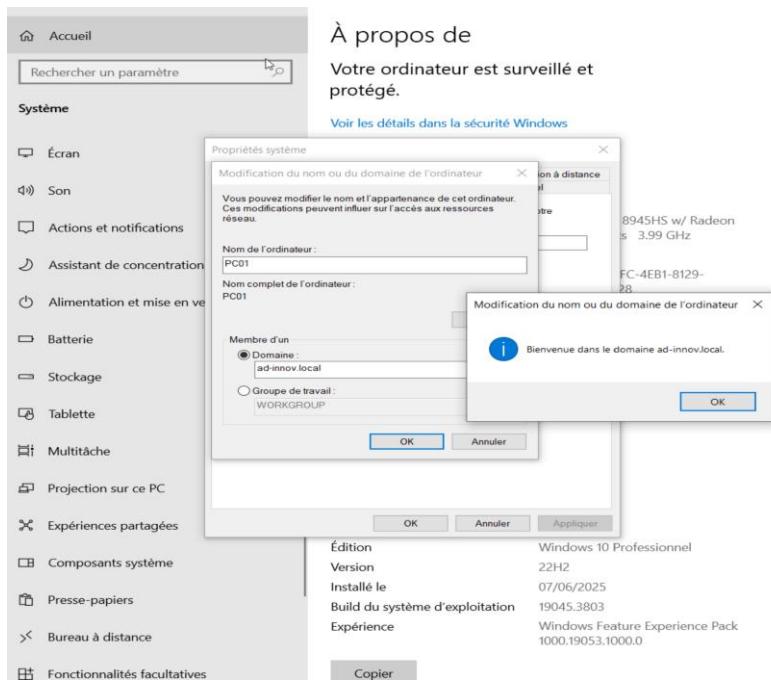
C:\Users\LOCALADMIN>
```





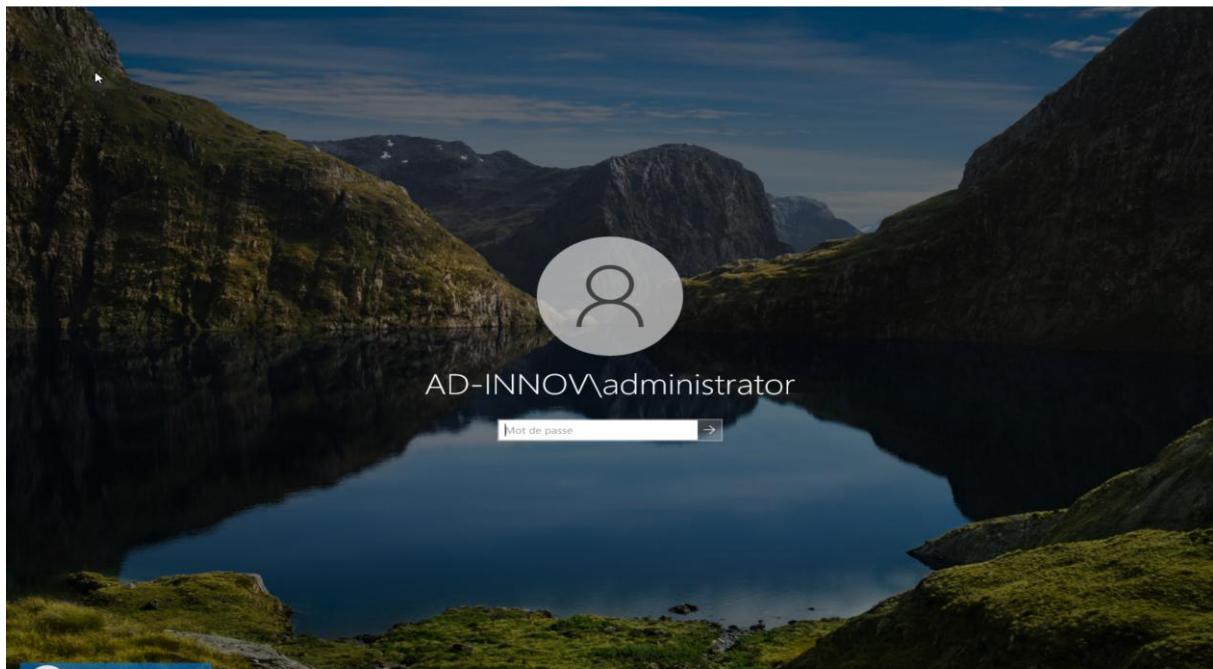
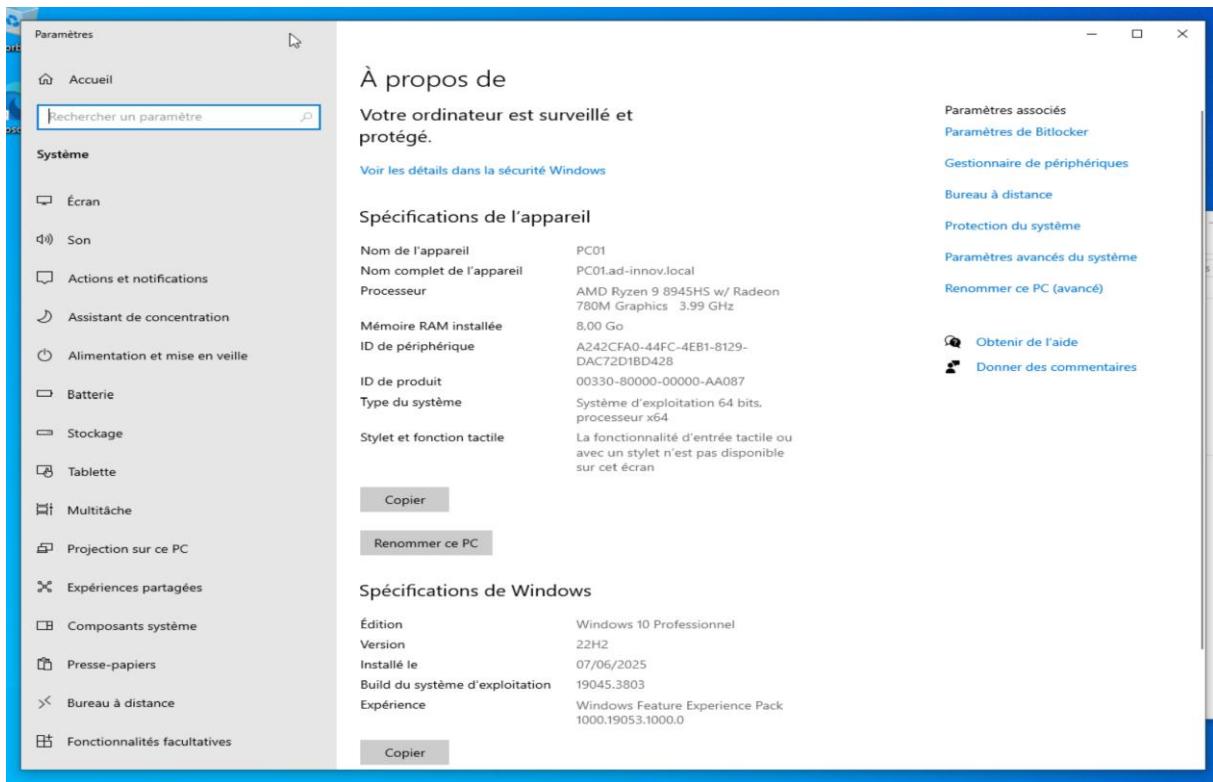
Paramètres associés
Paramètres de BitLocker
Gestionnaire de périphériques
Bureau à distance
Protection du système
Paramètres avancés du système
Renommer ce PC

Obtenir de l'aide
Donner des commentaires



Paramètres associés
Paramètres de BitLocker
Gestionnaire de périphériques
Bureau à distance
Protection du système
Paramètres avancés du système
Renommer ce PC (avancé)

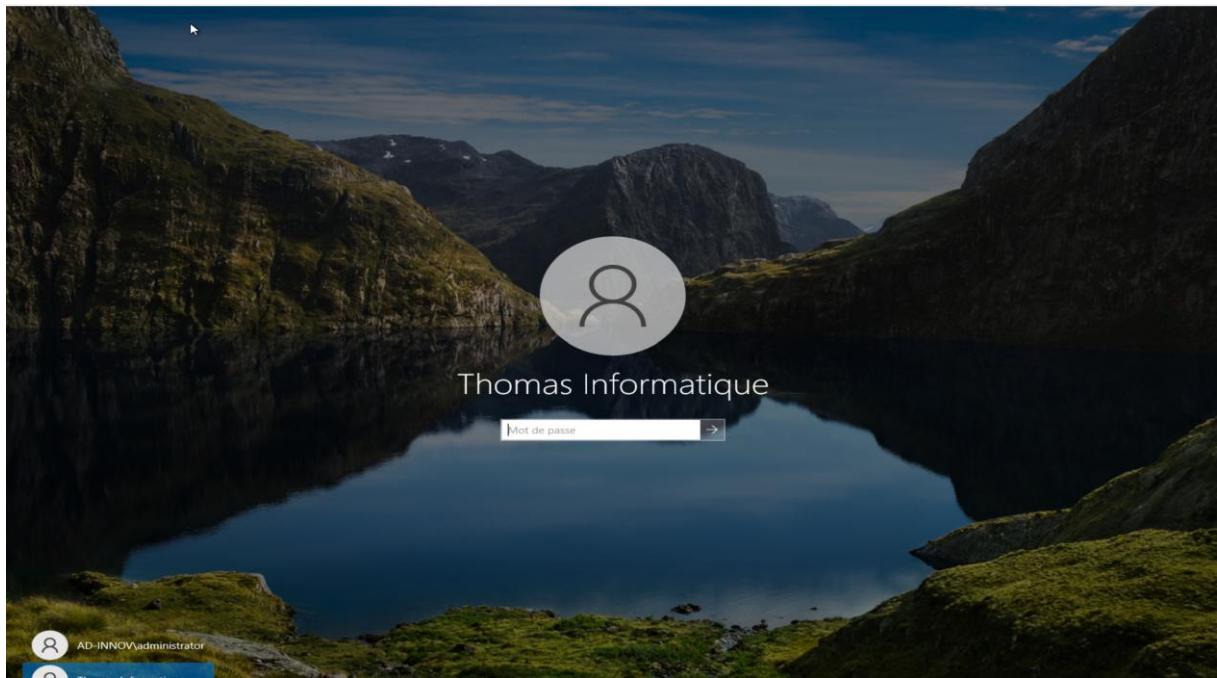
Obtenir de l'aide
Donner des commentaires



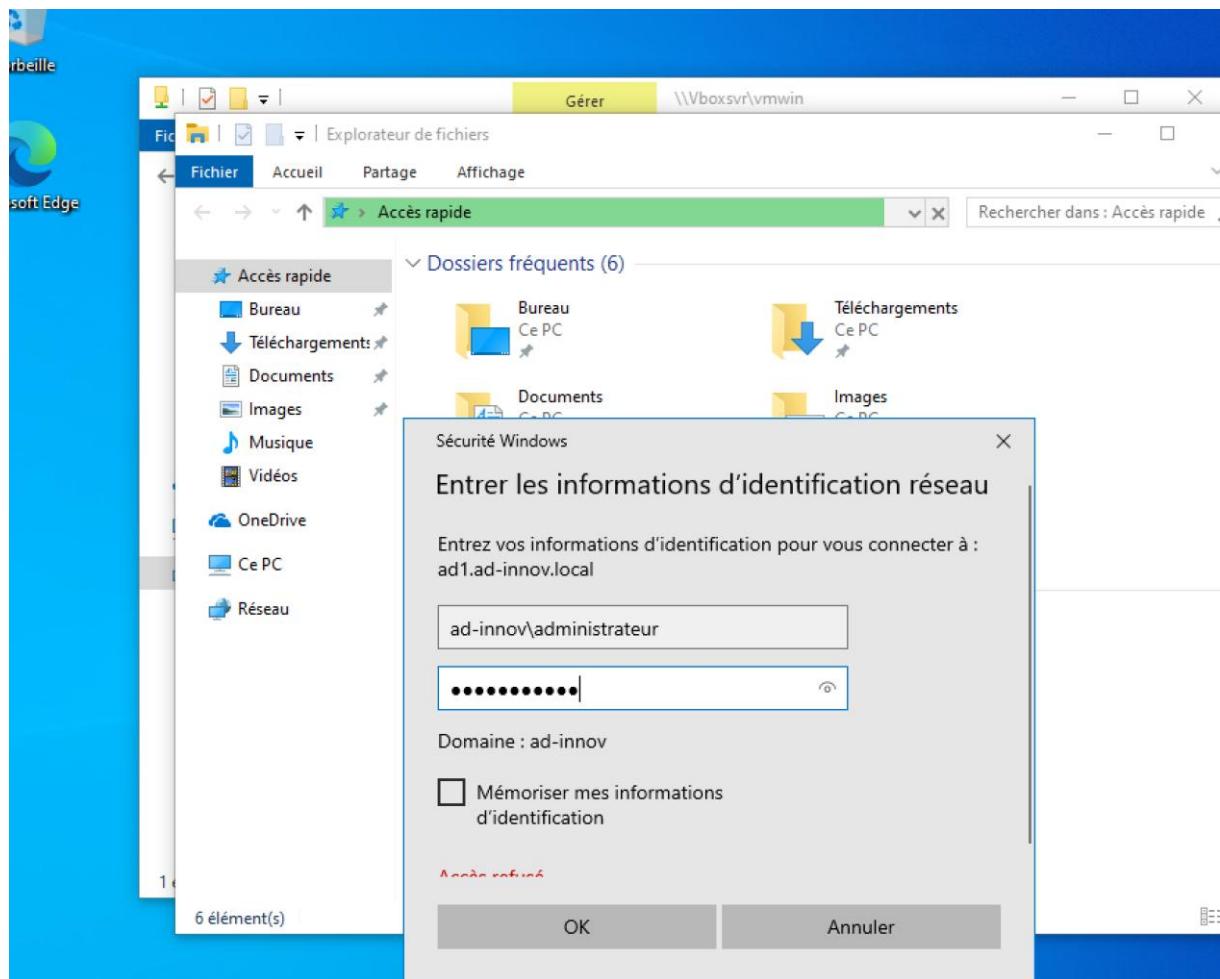
```
administrateur@samba-ad:~$ sudo samba-tool user list
thomas.it
mlambert
julie.rh
Guest
hmartin
jdupont
claire.compte
Administrator
cdubois
krbtgt
leo.stage
plefevre
directeur.directrice
administrateur@samba-ad:~$
```

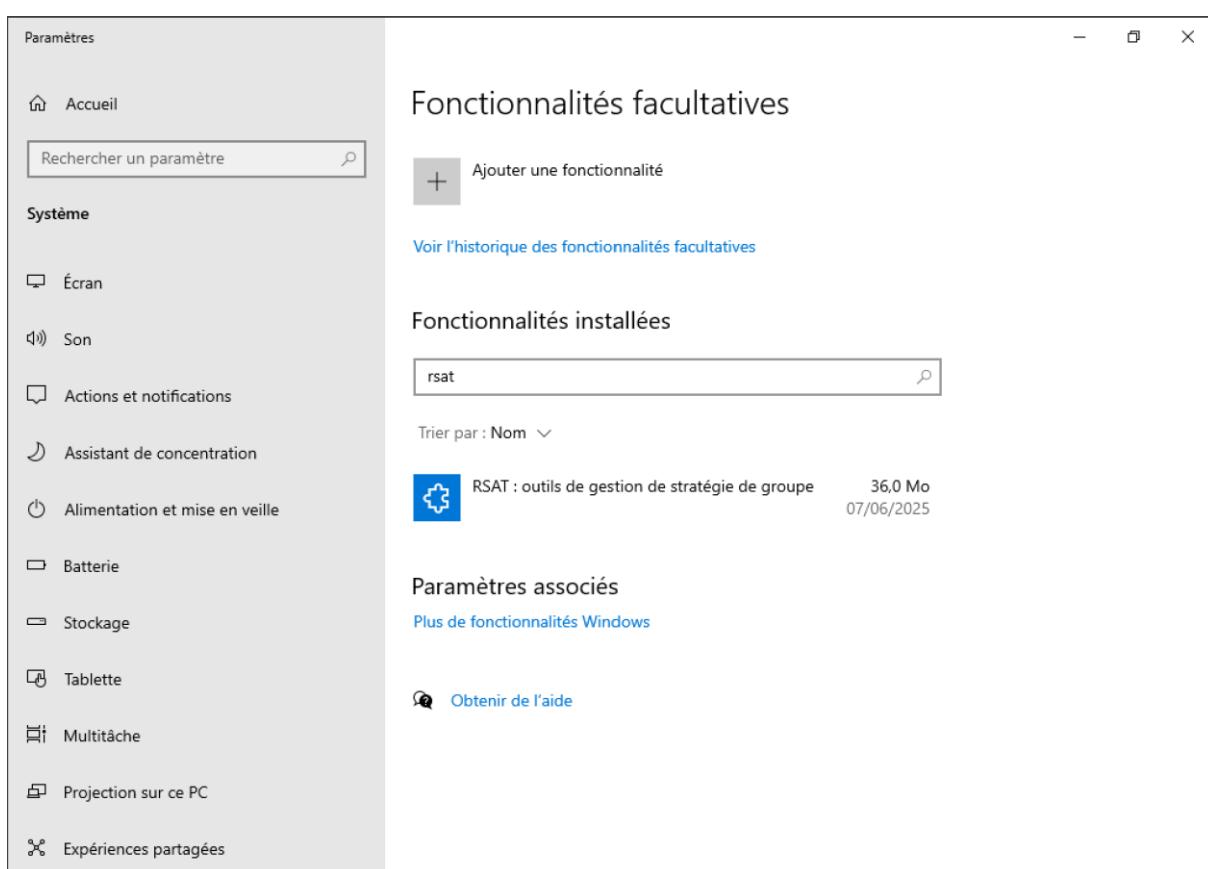
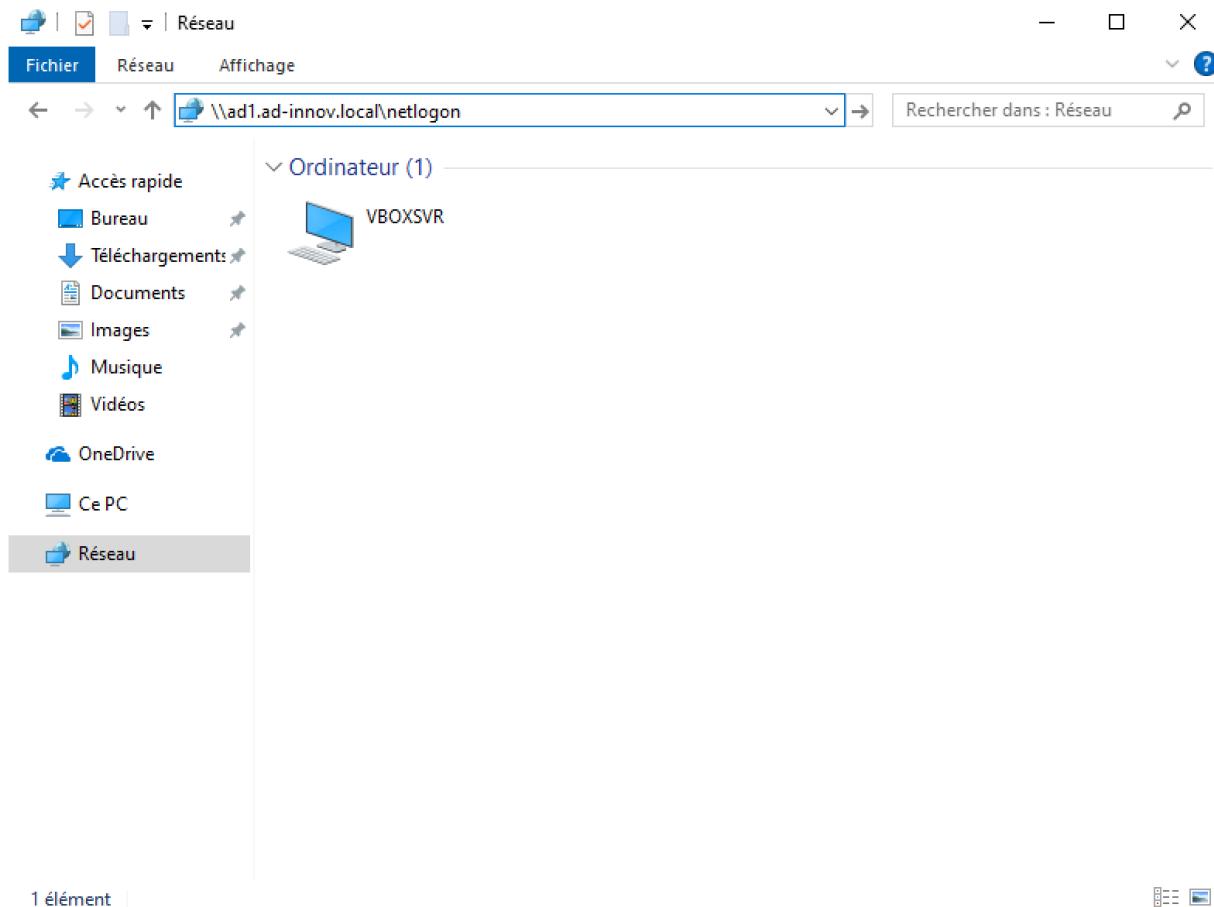
sudo samba-tool user setpassword thomas.it

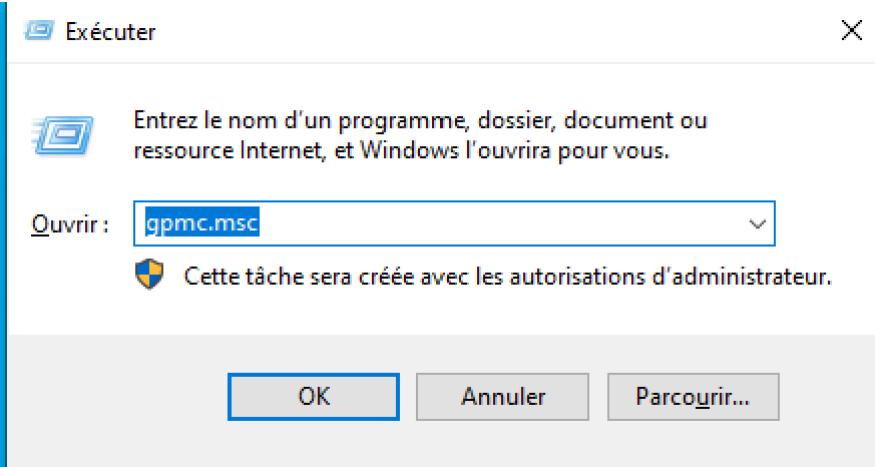
sudo samba-tool group addmembers informatique thomas.it



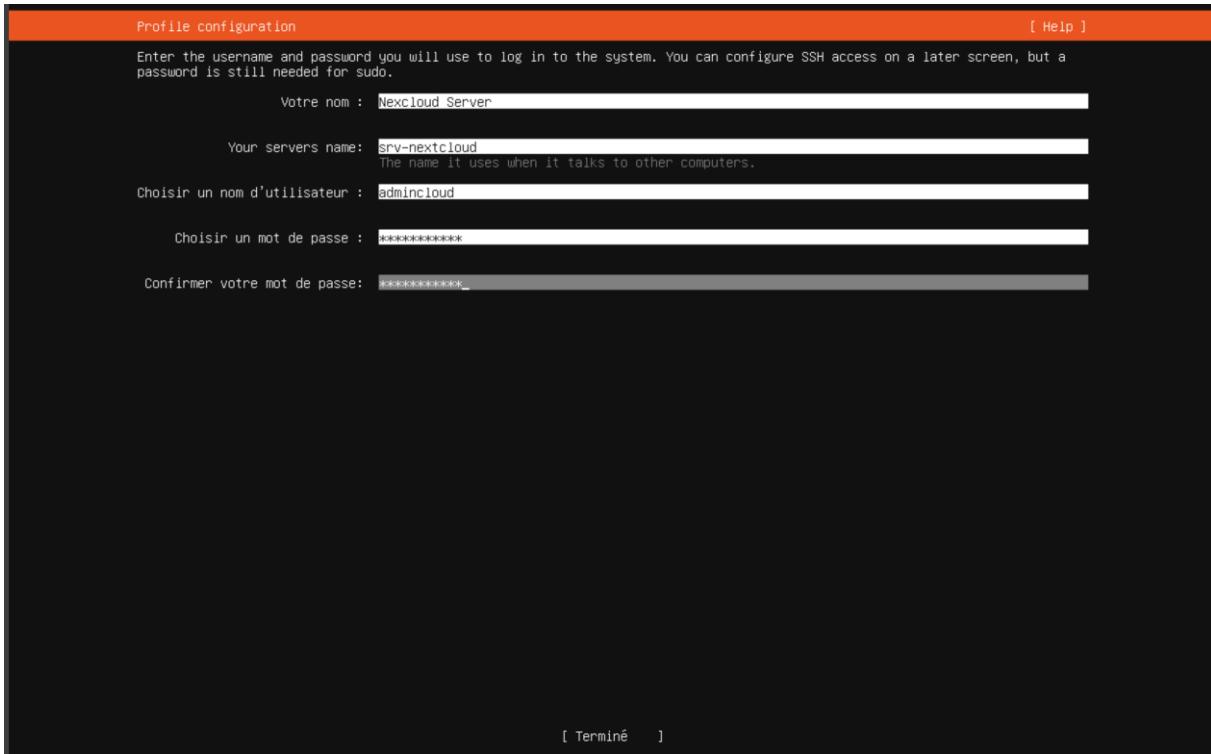
<\\ad1.ad-innov.local\\netlogon\\innov.png>







VM NEXTCLOUD



```
admincloud@srv-nextcloud:~$ sudo cat /etc/netplan/50-cloud-init.yaml
network:
  version: 2
  ethernets:
    enp0s3:
      addresses:
        - 10.0.0.30/24
      nameservers:
        addresses: [10.0.0.10]
        search: [ad-innov.local]
    enp0s8:
      dhcp4: true
      routes:
        - to: default
          via: 10.0.3.2
```

```
admincloud@srv-nextcloud:~$
```

```
admincloud@srv-nextcloud:~$ sudo apt update && sudo apt upgrade -y
```

```
admincloud@srv-nextcloud:~$ sudo apt install apache2 mariadb-server libapache2-mod-php php php-mysql php-gd php-json php-curl php-mbstring php-intl php-imagick
php-xml php-zip php-bcmath unzip -y
```

```
admincloud@srv-nextcloud:~$ cd /tmp
admincloud@srv-nextcloud:/tmp$ wget https://download.nextcloud.com/server/releases/latest.zip
--2025-06-07 14:16:17-- https://download.nextcloud.com/server/releases/latest.zip
Resolving download.nextcloud.com (download.nextcloud.com)... 5.9.202.145, 2a01:4f8:210:21c8::145
Connecting to download.nextcloud.com (download.nextcloud.com)|5.9.202.145|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 267256417 (255M) [application/zip]
Saving to: 'latest.zip'

latest.zip          10%[=====]   27.53M  8.04MB/s eta 85s
```

```
admincloud@srv-nextcloud:/tmp$ unzip latest.zip
```

```
admincloud@srv-nextcloud:/tmp$ sudo mv nextcloud /var/www/
admincloud@srv-nextcloud:/tmp$ sudo chown -R www-data:www-data /var/www/nextcloud
admincloud@srv-nextcloud:/tmp$
```

```
admincloud@srv-nextcloud:/tmp$ sudo nano /etc/apache2/sites-available/nextcloud.conf
```

```
GNU nano 7.2                                         /etc/apache2/sites-available/nextcloud.conf
<VirtualHost *:80>
    ServerAdmin admin@ad-innov.local
    DocumentRoot /var/www/nextcloud
    ServerName nextcloud.ad-innov.local

    <Directory /var/www/nextcloud/>
        Require all granted
        AllowOverride All
        Options FollowSymLinks MultiViews
    </Directory>

    ErrorLog ${APACHE_LOG_DIR}/nextcloud_error.log
    CustomLog ${APACHE_LOG_DIR}/nextcloud_access.log combined
</VirtualHost>
```

```
admincloud@srv-nextcloud:/tmp$ sudo apache2ctl configtest
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.1.1. Set the 'ServerName' directive globally to suppress this message
Syntax OK
```

```

GNU nano 7.2                               /etc/apache2/apache2.conf *

# AccessFileName: The name of the file to look for in each directory
# for additional configuration directives. See also the AllowOverride
# directive.
#
AccessFileName .htaccess

#
# The following lines prevent .htaccess and .htpasswd files from being
# viewed by Web clients.
#
<FilesMatch "\.ht">
    Require all denied
</FilesMatch>

#
# The following directives define some format nicknames for use with
# a CustomLog directive.
#
# These deviate from the Common Log Format definitions in that they use %o
# (the actual bytes sent including headers) instead of %b (the size of the
# requested file), because the latter makes it impossible to detect partial
# requests.
#
# Note that the use of %{X-Forwarded-For}i instead of %h is not recommended.
# Use mod_remoteip instead.
#
LogFormat "%v:%p %h %l %u %t \"%r\" %s %o \"%{Referer}i\" \"%{User-Agent}i\"%v" vhost_combined
LogFormat "%h %l %u %t \"%r\" %s %o \"%{Referer}i\" \"%{User-Agent}i\"%v" combined
LogFormat "%h %l %u %t \"%r\" %s %o" common
LogFormat "%{Referer}i -> %U" referer
LogFormat "%{User-agent}i" agent

# Include of directories ignores editors' and dpkg's backup files,
# see README.Debian for details.

# Include generic snippets of statements
IncludeOptional conf-enabled/*.conf

# Include the virtual host configurations:
IncludeOptional sites-enabled/*.conf
ServerName Localhost

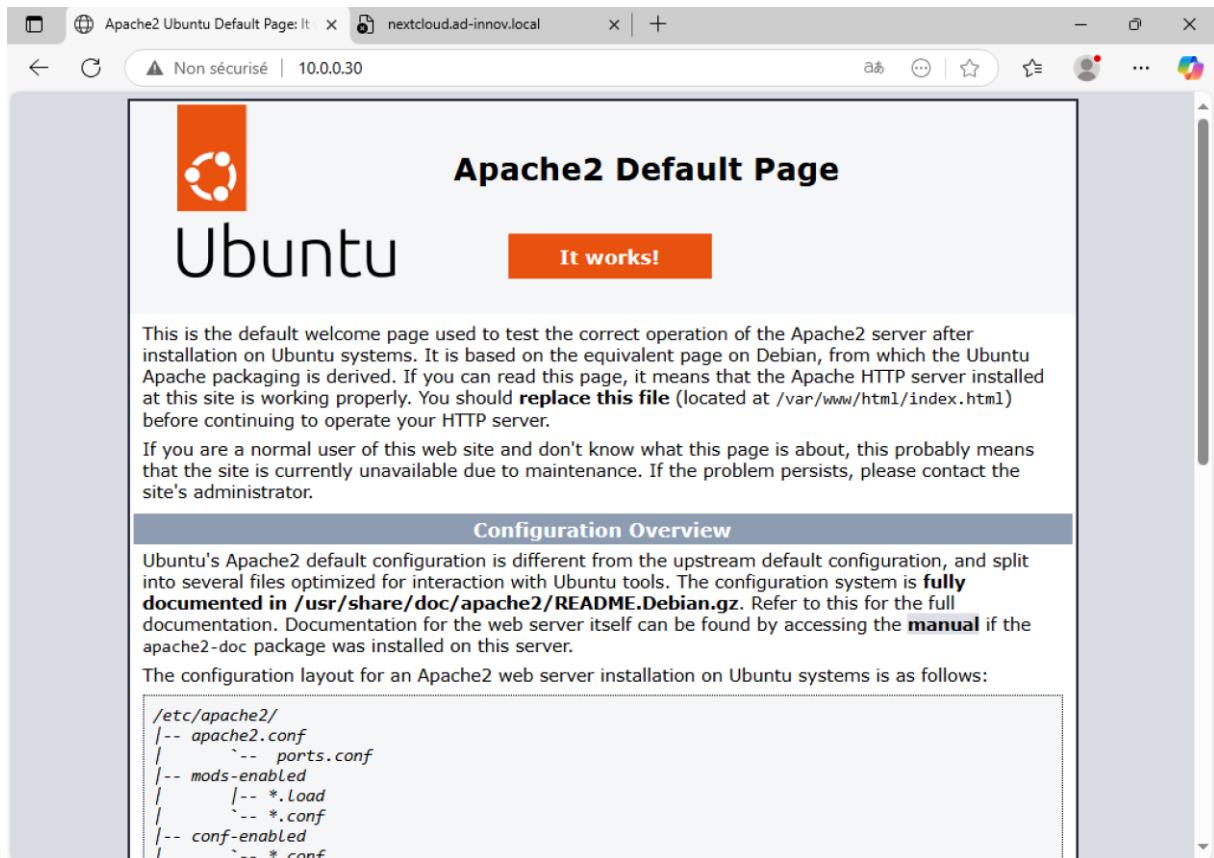
^G Help      ^O Write Out   ^W Where Is   ^K Cut        ^C Execute   ^C Location   M-U Undo   M-A Set Mark   M-] To Bracket   M-Q Previous
^X Exit      ^R Read File   ^N Replace   ^U Paste     ^J Justify   ^Y Go To Line  M-E Redo   M-C Copy      ^D Where Was   M-W Next

```

```

adminincloud@srv-nextcloud:/tmp$ sudo systemctl reload apache2
adminincloud@srv-nextcloud:/tmp$
```

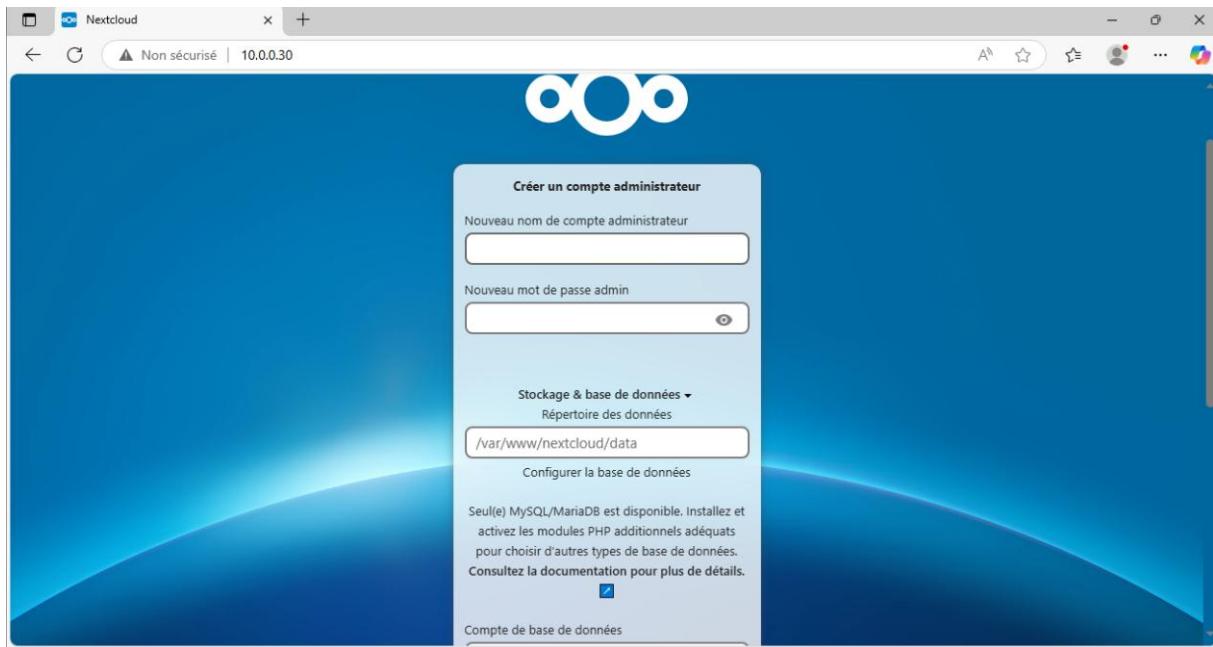
Sur la vm client



```
admincloud@srv-nextcloud:/tmp$ sudo rm /var/www/html/index.html
```

```
admincloud@srv-nextcloud:/tmp$ sudo mv nextcloud/* /var/www/nexcloud/_
```

```
admincloud@srv-nextcloud:/tmp$ sudo a2dissite 000-default.conf
Site 000-default disabled.
To activate the new configuration, you need to run:
  systemctl reload apache2
admincloud@srv-nextcloud:/tmp$ sudo a2ensite nextcloud.conf
Site nextcloud already enabled
admincloud@srv-nextcloud:/tmp$ sudo systemctl reload apache2
admincloud@srv-nextcloud:/tmp$
```



```
admincloud@srv-nextcloud:~$ sudo mysql -u root -p
[sudo] password for admincloud:
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 31
Server version: 10.11.13-MariaDB-0ubuntu0.24.04.1 Ubuntu 24.04

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

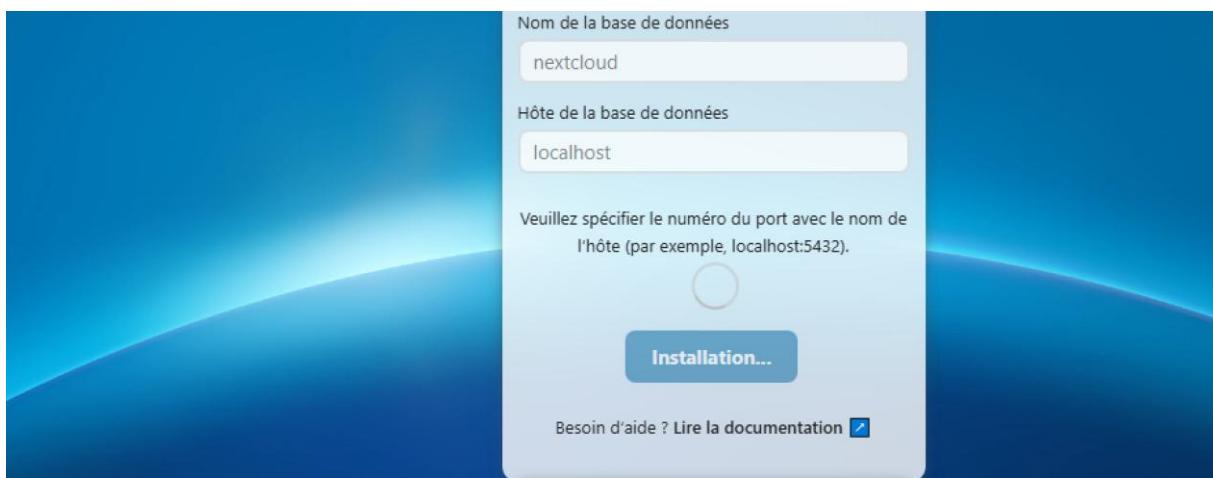
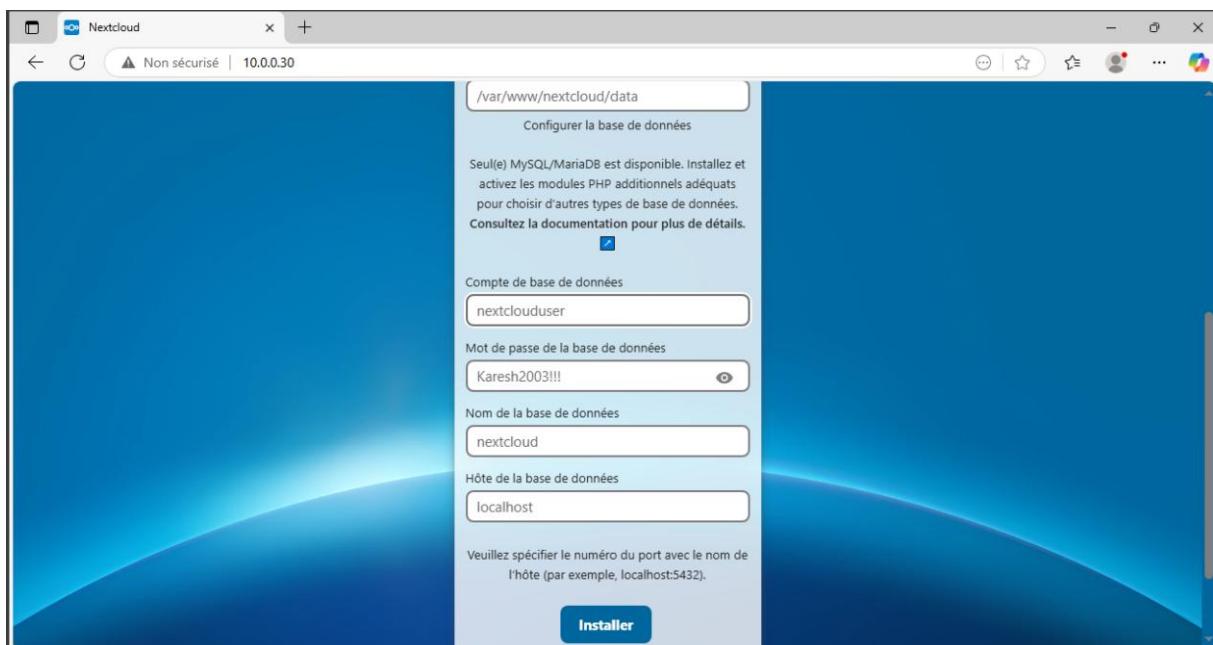
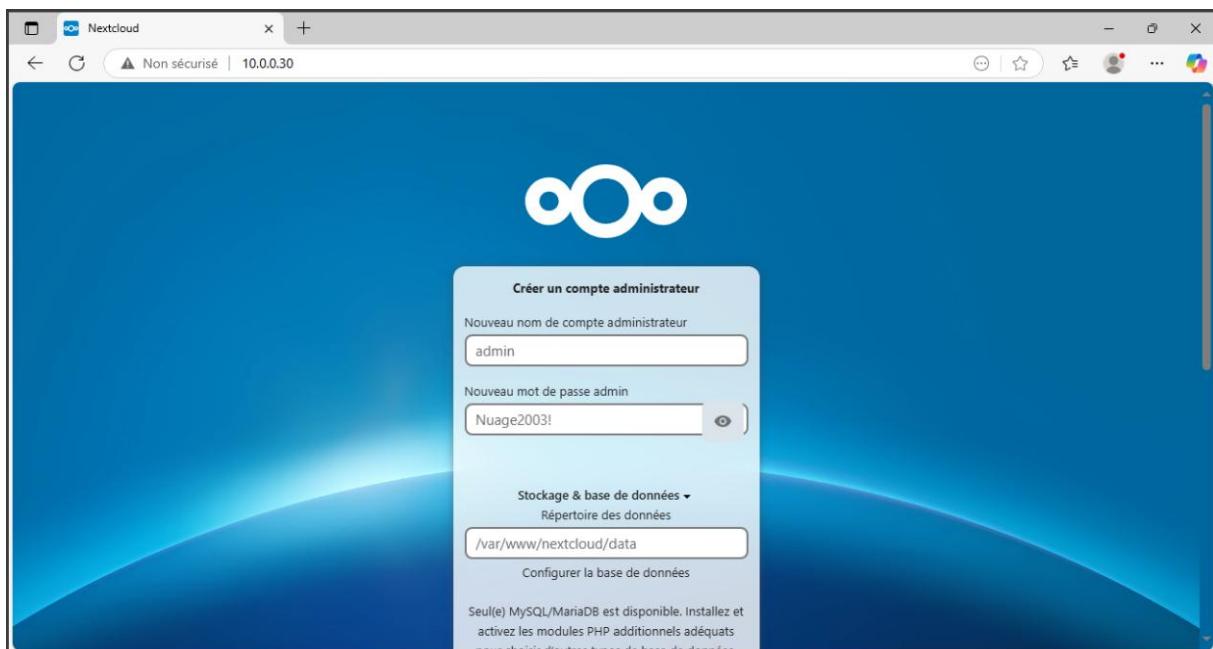
MariaDB [(none)]> create DATABASE nextcloud;
Query OK, 1 row affected (0,000 sec)

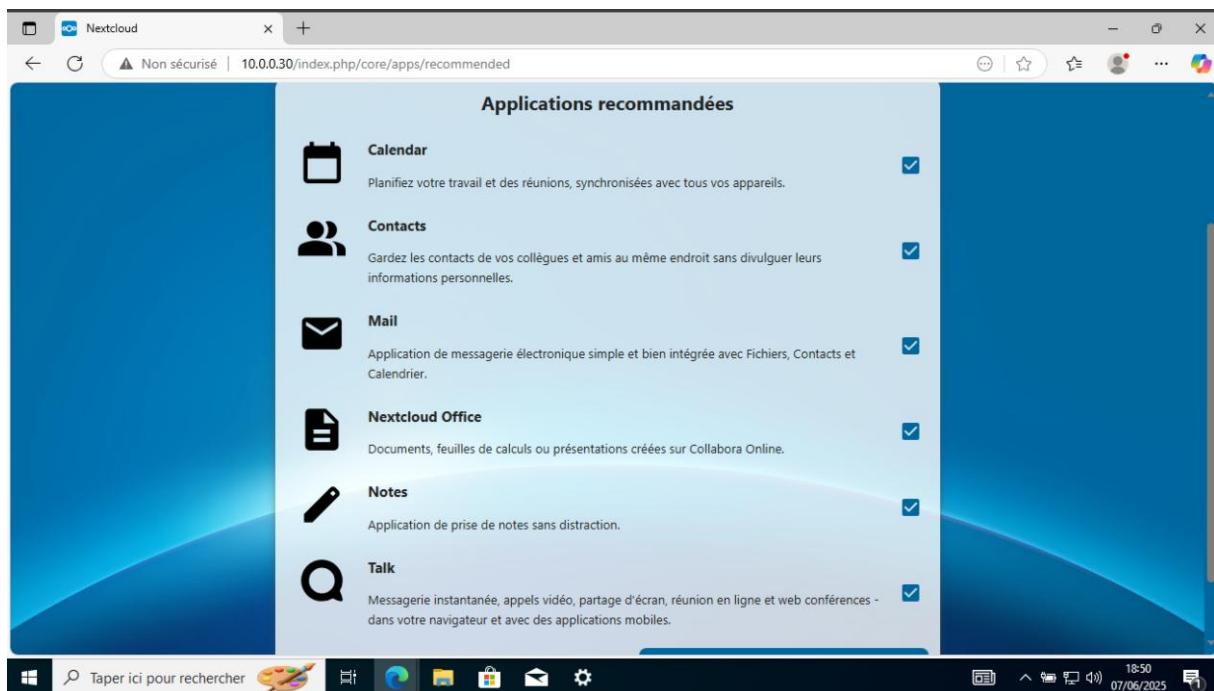
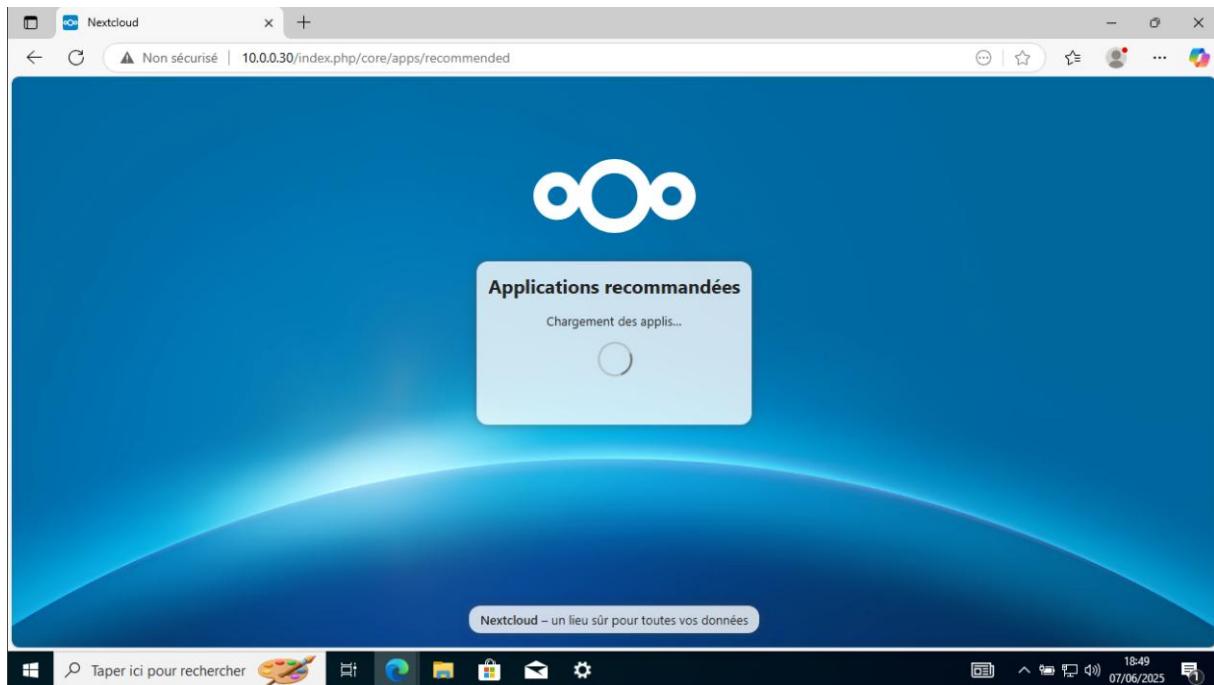
MariaDB [(none)]> CREATE USER 'nextclouduser'@'localhost' IDENTIFIED BY 'Karesh2003!!!';
Query OK, 0 rows affected (0,010 sec)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON nextcloud.* TO 'nextclouduser'@'localhost';
Query OK, 0 rows affected (0,003 sec)

MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0,001 sec)

MariaDB [(none)]> _
```







X

Une plateforme de collaboration qui vous donne le contrôle

Confidentialité

Hébergez vos données et vos fichiers où vous voulez.

Interopérabilité

Importez et exportez ce que vous voulez avec des standards ouverts.

Productivité

Collaborez et communiquez sur n'importe quelle plateforme.

Communauté

Profitez des améliorations continues d'une communauté open source dynamique.

Ce Nextcloud est en version 31.0.5

[Quoi de neuf ? →](#)

[Nextcloud sur tous vos appareils →](#)

Nouveautés de Nextcloud Hub 10

-  Chiffrement de bout en bout pour les appels et le web
-  Améliorations des performances à travers tous nos produits
-  Des milliers d'ajustements pour une expérience utilisateur et une stabilité améliorée
-  Votre nouveau propre assistant personnel
-  Seamless file conversions
-  Smarter team sharing with Team folders
-  Programmer les réunions directement dans Talk
-  Mail you love again: translations, summaries, and mentions

Partager sur les réseaux sociaux →

```
admincloud@srv-nextcloud:~$ sudo apt install php-ldap
```

```
admincloud@srv-nextcloud:~$ sudo systemctl restart apache2
admincloud@srv-nextcloud:~$ sudo -u www-data php /var/www/nextcloud/occ app:enable user_ldap
user_ldap 1.22.0 enabled
admincloud@srv-nextcloud:~$ _
```

Applications actives - Boutique d'application

Non sécurisé | 10.0.0.30/index.php/settings/apps/enabled

Découvrir

Vos applications

Applications actives

Applications désactivées

Packs d'applications

Applications en vedette

AI

Personnalisation

Tableau de bord

Fichiers

Jeux

Intégration

Supervision

Toutes les applications sont à jour.

Application	Version	Statut	Action
File reminders	1.4.0	<input checked="" type="checkbox"/> En vedette	Désactiver
File sharing	1.23.1	<input checked="" type="checkbox"/> En vedette	Désactiver
Files download limit	4.0.0	<input checked="" type="checkbox"/> En vedette	Désactiver
First run wizard	4.0.0	<input checked="" type="checkbox"/> En vedette	Désactiver
LDAP user and group backend	1.22.0	<input checked="" type="checkbox"/> En vedette	Désactiver
Log Reader	4.0.0	<input checked="" type="checkbox"/> En vedette	Désactiver
Mail	5.1.2	<input checked="" type="checkbox"/> En vedette	Désactiver
Monitoring	3.0.0	<input checked="" type="checkbox"/> En vedette	Désactiver
Nextcloud Office	8.7.0	<input checked="" type="checkbox"/> En vedette	Désactiver

10.0.0.30/index.php/settings/apps/enabled/files_downloadlimit

admin

Voir le profil

Définir le statut

Apparence et accessibilité

Paramètres personnels

Paramètres d'administration

Applications

Comptes

À propos & quoi de neuf ?

Aide & confidentialité

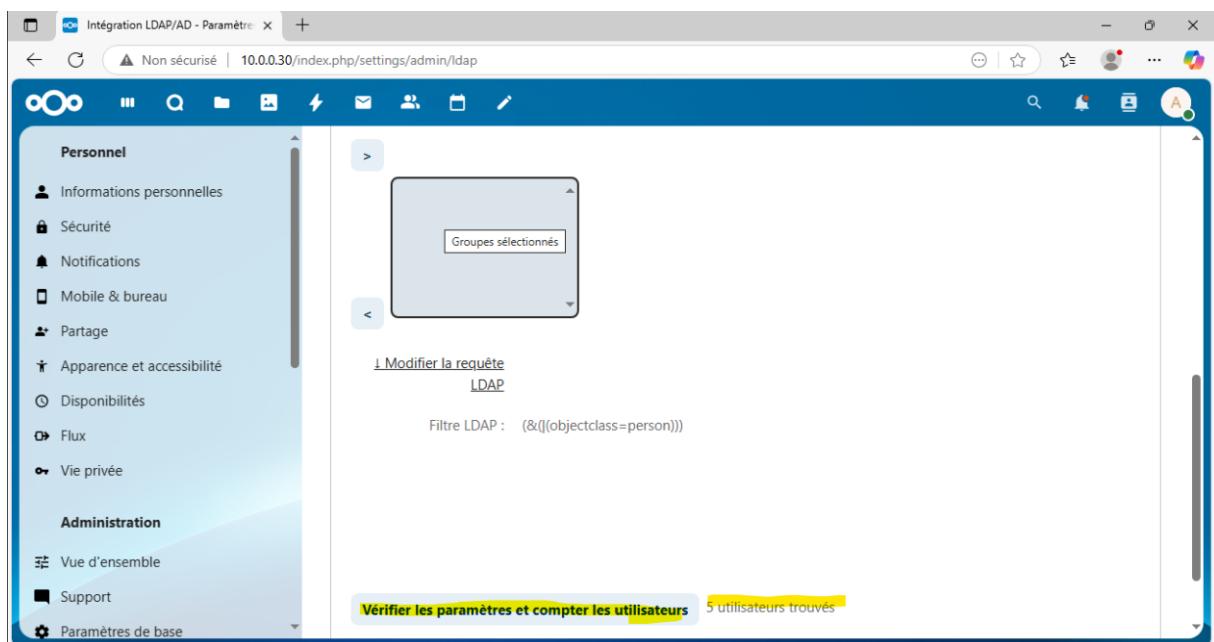
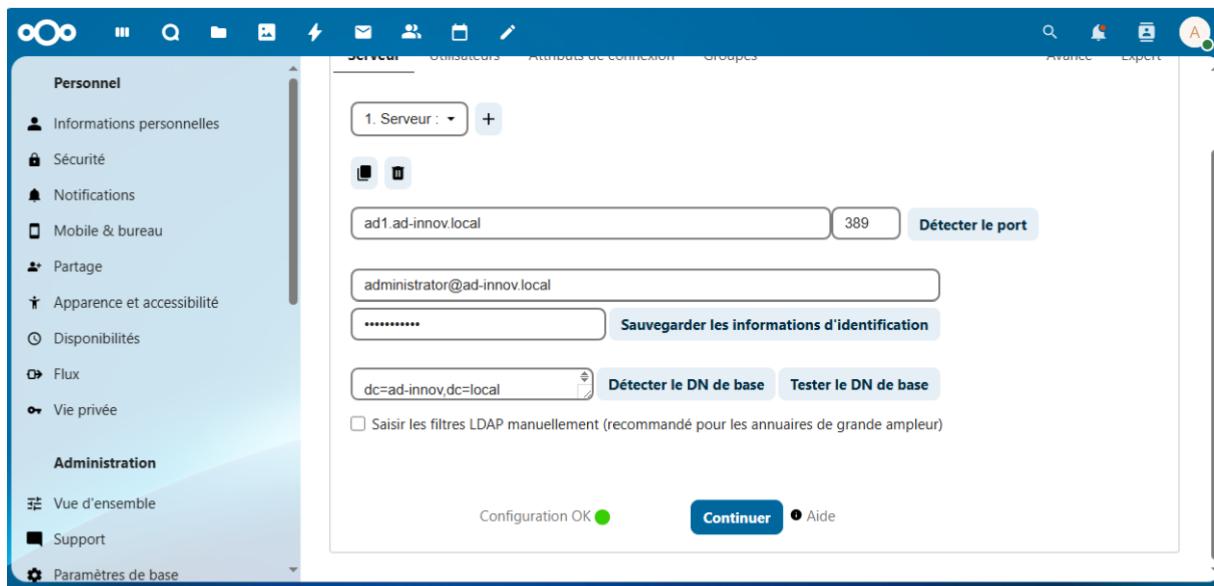
Se déconnecter

The screenshot shows a web-based administration interface for managing LDAP/AD integration. The left sidebar lists various system settings like Support, Paramètres de base, and Intégration LDAP/AD, which is currently selected. The main panel is titled 'Intégration LDAP/AD' and contains several configuration fields:

- A dropdown menu for 'Serveur' with an option '1. Serveur :'.
- Two small icons for adding or deleting servers.
- A 'Hôte' input field containing 'Hôte' with a 'Port' dropdown set to '636' and a 'Détecter le port' button.
- An 'Utilisateur DN' input field containing 'Mot de passe' with a 'Sauvegarder les informations d'identification' button.
- A dropdown for 'Un DN de base par ligne' with a 'Détecter le DN de base' and 'Tester le DN de base' button.
- A checkbox for 'Saisir les filtres LDAP manuellement (recommandé pour les annuaires de grande ampleur)'.

This screenshot shows the same configuration page after some values have been entered. The 'Hôte' field now contains 'ldap://ad1.ad-innov.local' with a port of '636'. The 'Utilisateur DN' field contains 'administrator@ad-innov.local' and '*****'. The 'Sauvegarder les informations d'identification' button is highlighted in blue. The rest of the interface remains the same, including the sidebar and the bottom configuration options.

```
administrateur@samba-ad:~$ sudo ldbsearch -H /var/lib/samba/private/sam.ldb | grep "dn:" | head -n 1
[sudo] password for administrateur:
dn: CN=57428d75-beff-43e1-938b-2e749f5a8d56,CN=Operations,CN=DomainUpdates,CN=System,DC=ad-innov,DC=local
administrateur@samba-ad:~$ _
```



Loginname de t...

Tester les paramètres

Configuration OK OK Retour Continuer Aide

Pour ajouter les spécifiques

```
administrateur@samba-ad:~$ sudo ldbsearch -H /var/lib/samba/private/sam.ldb -b 'objectClass=organizationalUnit' dn
search error - No such Base DN: objectClass=organizationalUnit)
administrateur@samba-ad:~$ sudo ldbsearch -H /var/lib/samba/private/sam.ldb -b "DC=ad-innov,DC=local" "(objectClass=organizationalUnit)" dn
# record 1
dn: OU=direction,DC=ad-innov,DC=local

# record 2
dn: OU=Comptabilité,DC=ad-innov,DC=local

# record 3
dn: OU=Stagiaire,DC=ad-innov,DC=local

# record 4
dn: OU=Domain Controllers,DC=ad-innov,DC=local

# record 5
dn: OU=Informatique,DC=ad-innov,DC=local

# record 6
dn: OU=RH,DC=ad-innov,DC=local

# Referral
ref: ldap://ad-innov.local/CN=Configuration,DC=ad-innov,DC=local

# Referral
ref: ldap://ad-innov.local/DC=DomainDnsZones,DC=ad-innov,DC=local

# Referral
ref: ldap://ad-innov.local/DC=ForestDnsZones,DC=ad-innov,DC=local

# returned 9 records
# 6 entries
# 3 referrals
administrateur@samba-ad:~$ _
```

REQUETE GROUP LDAP

```
(&(objectClass=group)()
  (cn=Administrators)
  (cn=Domain Admins)
  (cn=grp_direction)
  (cn=grp_comptabilite)
  (cn=grp_informatique)
  (cn=grp_rh)
  (cn=grp_stagiaire)
))
```

Vérifier les paramètres et compter les groupes

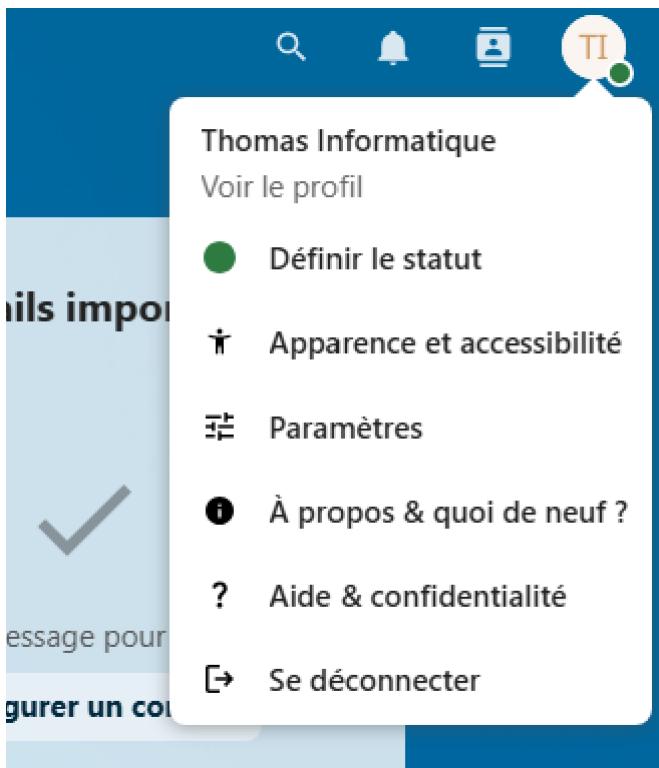
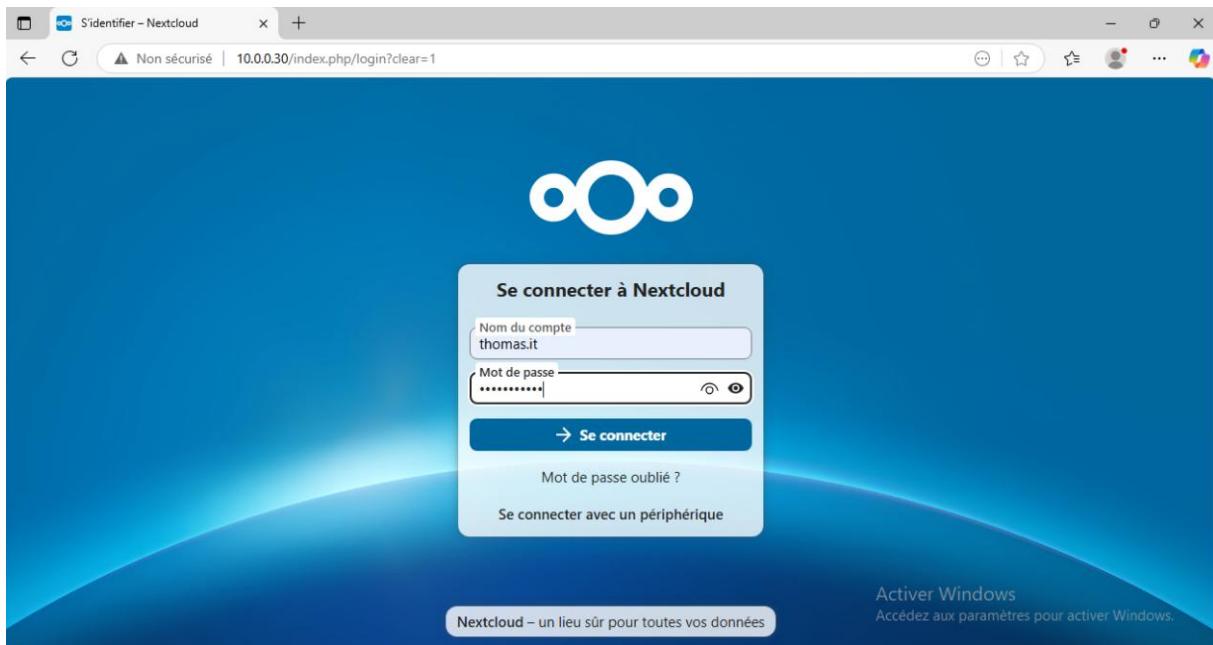
43 groupes trouvés

Configuration OK

Retour

Aide

Activer Win



Commande pour disque monter enable

```
admincloud@srv-nextcloud:~$ sudo -u www-data php /var/www/nextcloud/occ app:enable files_external
[sudo] password for admincloud:
files_external 1.23.0 enabled
admincloud@srv-nextcloud:~$ _
```



The screenshot shows the Nextcloud administration interface at the URL 10.0.0.30/index.php/settings/admin/externalstorages. The left sidebar has sections like Personnel, Stockage externe, Mobile & bureau, Partage, Apparence et accessibilité, Disponibilités, Flux, Vie privée, Administration, Vue d'ensemble, and Support. The main content area is titled "Stockage externe" and contains a sub-section "Informations d'identification globales". It explains that global identifiers can be used to log in to multiple external storage providers with the same identifier. There are fields for "Identifiant" and "Mot de passe" with a "Enregistrer" button. A note at the bottom right says "Activer Windows" and "Accédez aux paramètres pour activer Windows.".

Installer smbclient sur nextcloud

```
admincloud@srv-nextcloud:~$ sudo apt install smbclient php-smbclient -y
```

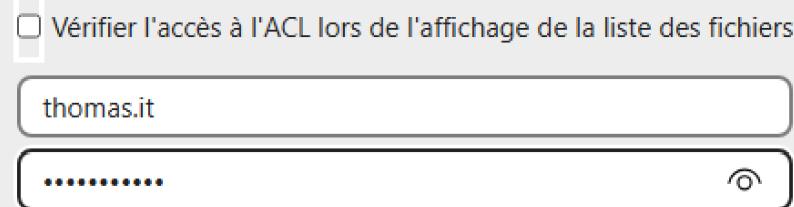
The screenshot shows the Nextcloud administration interface with the "Stockage externe" (External Storage) settings page selected. On the left, a sidebar lists various administrative categories like Personnel, Stockage externe, and Administration. The main area displays a table for external storage configurations:

Nom du dossier	Stockage externe	Authentification	Configuration
	SMB/CIFS	Identifiant et ...	<input type="text" value="ad1.ad-innov.local"/> <input type="text" value="IT_Partage"/> <input type="text" value="it_partage"/> <input type="text" value="AD-INNOV"/>

Below the table, there are several configuration options with checkboxes:

- Vérifier l'accès à l'ACL lors de l'affichage de la liste des fichiers (unchecked)
- Afficher les fichiers masqués (unchecked)
- Système de fichiers sensible à la casse
- Vérifier l'accès à l'ACL lors de l'affichage de la liste des fichiers (unchecked)

At the bottom right, there is a "Activer Windows" button.



```
sudo mkdir -p /srv/partages/IT_Partage
```

Dans /etc/samba/smb.conf, tu dois avoir ça **dans la section [global]** :

```
[global]
workgroup = AD-INNOV
security = ADS
realm = AD-INNOV.LOCAL
...
vfs objects = acl_xattr
map acl inherit = yes
store dos attributes = yes
```

```
GNU nano 7.2                                     /etc/samba/smb.conf
# Global parameters
[global]
dns forwarder = 8.8.8.8
netbios name = SAMBA-AD
realm = AD-INNOV.LOCAL
server role = active directory domain controller
workgroup = AD-INNOV
idmap_ldb:use rfc2307 = yes
ldap server require strong auth = no

[sysvol]
path = /var/lib/samba/sysvol
read only = No
browseable = yes
guest ok = yes

[netlogon]
path = /var/lib/samba/sysvol/ad-innov.local/scripts
read only = No
browseable = yes

[IT_Partage]
path = /srv/partages/IT_Partage
browseable = yes
read only = no
guest ok = no
valid users = @"informatique"


```

```
admin@hosteur@samba-ad:~$ sudo /etc/samba/smb.conf
```

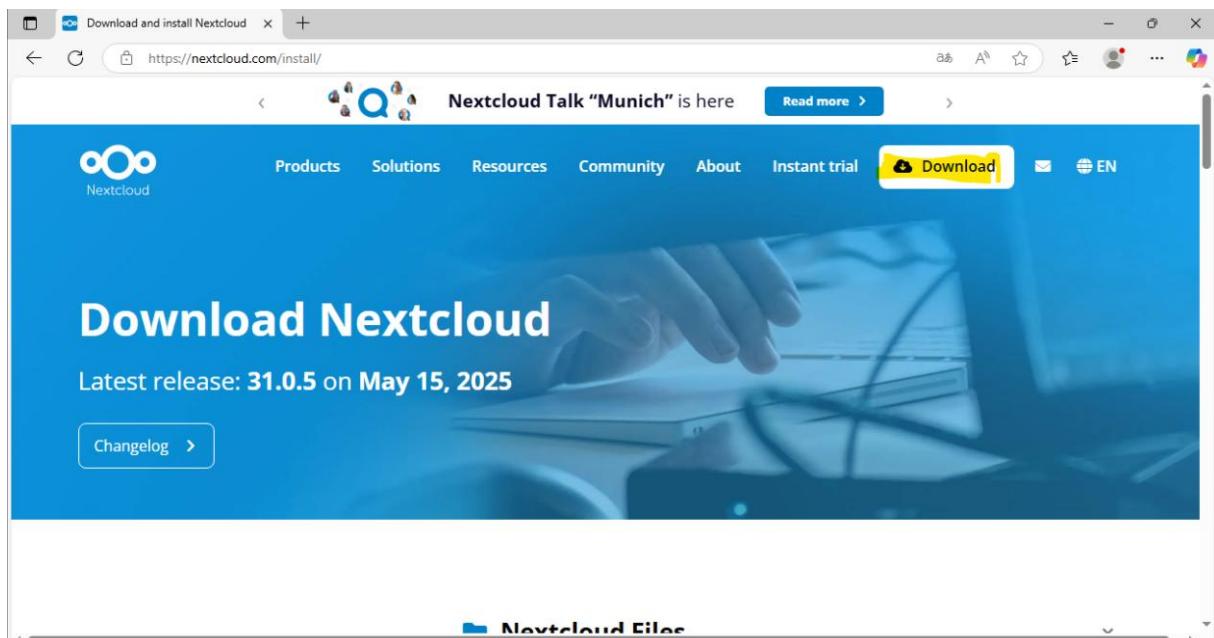
sudo systemctl restart smbd

```
admincloud@srv-nextcloud:~$ sudo mkdir -p /srv/partages/IT_Partage
admincloud@srv-nextcloud:~$ sudo chown -R informatique /srv/partages/IT_Partage
chown: invalid user: 'informatique'
admincloud@srv-nextcloud:~$ sudo chown -R :informatique /srv/partages/IT_Partage
chown: invalid group: ':informatique'
admincloud@srv-nextcloud:~$ sudo chown :informatique /srv/partages/IT_Partage
chown: invalid group: ':informatique'
admincloud@srv-nextcloud:~$ sudo chown :Informatique /srv/partages/IT_Partage
chown: invalid group: ':Informatique'
admincloud@srv-nextcloud:~$
```

getent group "domain users"

Connecte-toi à une machine Windows du domaine avec un compte admin (ex: administrator@ad-innov.local).

<\\ad1.ad-innov.local>



A screenshot of the same Nextcloud website page, specifically the "Desktop" download section. The URL is <https://nextcloud.com/install/#desktop-files>. A modal window titled "Téléchargements" is open, showing a single file: "Nextcloud-3.16.5-x64.msi" (5.0 Mo/s - 47.5 Mo sur 160 Mo, 18 s restantes). Below the modal, there is a link to "Afficher plus". To the left, there is a section titled "Download for desktop" with a "More about clients" link. To the right, there are sections for "Nextcloud Talk", "Integrations apps", and "Documentation and source code".

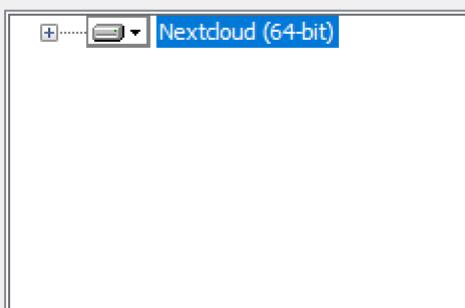
Nextcloud Setup

Custom Setup

Select the way you want features to be installed.



Click the icons in the tree below to change the way features will be installed.



Nextcloud 3.16.5 (build 20250602)
(Git revision 930e6e6)

This feature requires 387MB on your hard drive. It has 3 of 3 subfeatures selected. The subfeatures require 314KB on your hard drive.

Location: C:\Program Files\Nextcloud\

[Browse...](#)

[Reset](#)

[Disk Usage](#)

[Back](#)

[Next](#)

[Cancel](#)



Ajout du compte Nextcloud



**Gardez vos données en
sécurité et sous votre contrôle**

[Se connecter](#)

[S'inscrire auprès d'un fournisseur](#)

Hébergez votre propre serveur



Ajout du compte Nextcloud



Adresse du serveur

Adresse URL visible dans la barre d'adresse de
votre navigateur Web lorsque vous êtes
connecté à Nextcloud.

< [Précédent](#)

[Suivant >](#)

Ajout du compte Nextcloud X

TI ↔ Dossier local

Thomas Informatique **Dossier local**
10.0.0.30 C:\Users\thomas.it\Nextcloud
espace libre 13 Go

[Choisir un autre dossier](#)

Tout synchroniser depuis le serveur (34 Mo)
 Demander confirmation avant de synchroniser les dossiers de taille supérieure à Mo
 Demander confirmation avant de synchroniser des stockages externes
 Sélectionner le contenu à synchroniser
 Utiliser les fichiers virtuels plutôt que de télécharger le contenu immédiatement

[Annuler](#) [Ignorer la configuration des dossiers](#) [Connexion](#)

INSTALLATION NETDATA

Machine SAMBA

```
administrateur@samba-ad:~$ bash <(curl -L https://my-netdata.io/kickstart.sh)
% Total    % Received % Xferd  Average Speed   Time     Time   Current
          Dload  Upload   Total Spent  Left  Speed
100  171    0  171    0      0  1427      0  --:--:-- --:--:-- 1436
  0    0      0      0      0      0  1427      0  --:--:-- --:--:-- 0
100 95337  100 95337    0      0  164k      0  --:--:-- --:--:-- 269k

--- Using /tmp/netdata-Kickstart-5uFTgxwpxz as a temporary directory. ---
--- Checking for existing installations of Netdata... ---
--- No existing installations of netdata found, assuming this is a fresh install. ---
--- Attempting to install using native packages... ---
--- Checking for availability of repository configuration package. ---
[~/tmp/netdata-kickstart-5uFTgxwpxz]$ /usr/bin/curl --fail -q -Ssl --connect-timeout 10 --retry 3 --output /tmp/netdata-kickstart-5uFTgxwpxz/netdata-repo-edge_5
1+ubuntu24.04_all.deb https://repo.netdata.cloud/repos/repoconfig/ubuntu/noble/netdata-repo-edge_5-1+ubuntu24.04_all.deb
OK

Root privileges required to run env apt-get update
[~/tmp/netdata-kickstart-5uFTgxwpxz]$ sudo env apt-get update
[sudo] password for administrateur:
```

```
administrateur@samba-ad:~$ sudo systemctl status netdata
● netdata.service - Netdata, X-Ray Vision for your infrastructure!
  Loaded: loaded (/usr/lib/systemd/system/netdata.service; enabled; preset: enabled)
  Active: active (running) since Sat 2025-06-07 22:15:36 UTC; 1min 18s ago
    Process: 5568 ExecStartPre=/bin/mkdir -p /var/cache/netdata (code=exited, status=0/SUCCESS)
   Process: 5570 ExecStartPre=/bin/chown -R netdata /var/cache/netdata (code=exited, status=0/SUCCESS)
 Main PID: 5571 (netdata)
   Tasks: 100 (limit: 9437)
  Memory: 99.3M (peak: 102.7M)
    CPU: 5.575s
   CGroup: /system.slice/netdata.service
           ├─5571 /usr/sbin/netdata -P /run/netdata/netdata.pid -D
           ├─5612 "spawn-plugins" " "
           ├─6005 /usr/libexec/netdata/plugins.d/ebpf.plugin 1
           ├─6020 /usr/libexec/netdata/plugins.d/apps.plugin 1
           ├─6024 /usr/libexec/netdata/plugins.d/go_d.plugin 1
           ├─6026 bash /usr/libexec/netdata/plugins.d/tc-qos-helper.sh 1
           ├─6027 /usr/libexec/netdata/plugins.d/systemd-journal.plugin 1
           ├─6028 /usr/libexec/netdata/plugins.d/network-viewer.plugin 1
           ├─6030 /usr/libexec/netdata/plugins.d/debugfs.plugin 1
           ├─6036 /usr/libexec/netdata/plugins.d/nfacct.plugin 1
           └─6060 "Spawn-setns" " "

Juin 07 22:15:45 samba-ad netdata[5571]: PLUGINSD: 'host:samba-ad', '/usr/libexec/netdata/plugins.d/python.d.plugin' (pid 6043) disconnected after 0 successful
Juin 07 22:15:45 samba-ad netdata[5571]: PLUGINSD: 'host:samba-ad', '/usr/libexec/netdata/plugins.d/python.d.plugin' (pid 6043) does not generate useful output
Juin 07 22:15:46 samba-ad netdata[5571]: Dimension metadata check has been scheduled to run (max id = 2083)
Juin 07 22:15:46 samba-ad netdata[5571]: Chart metadata check has been scheduled to run (max id = 965)
Juin 07 22:15:46 samba-ad netdata[5571]: Chart label metadata check has been scheduled to run (max id = 3137)
Juin 07 22:15:52 samba-ad cgroup-name.sh[6319]: cgroup 'user.slice_user-1000.slice_user_1000.service_init.scope' is called 'user.slice_user-1000.slice_user_1000.service'
Juin 07 22:15:52 samba-ad cgroup-name.sh[6320]: cgroup 'user.slice_user-1000.slice_session-1.scope' is called 'user.slice_user-1000.slice_session-1.scope', lab
Juin 07 22:15:52 samba-ad cgroup-name.sh[6327]: cgroup 'init.scope' is called 'init.scope', labels ''
Juin 07 22:15:52 samba-ad cgroup-name.sh[6331]: cgroup 'system.slice_systemd-udevd.service_uddev' is called 'system.slice_systemd-udevd.service_uddev', labels ''
Juin 07 22:16:00 samba-ad netdata[5571]: ALERT 'system_clock_sync_state' of 'system_clock_sync_state' on node 'samba-ad', raised from UNINITIALIZED to WARNING.
  ++ When set to 0, the system kernel believes the system clock is not properly synchronized to a reliable server on samb
x
  samba-ad:system.clock_sync_state:system_clock_sync_state value got from nan synchronization state, to 0.000000 synchronize
lines 1-34/34 (END)
administrateur@samba-ad:~$ _
```

```
administrateur@samba-ad:~$ sudo apt install net-tools
Lecture des listes de paquets... Fait
Construction de l'arbre des dépendances... Fait
Lecture des informations d'état... Fait
Les NOUVEAUX paquets suivants seront installés :
  net-tools
0 mis à jour, 1 nouvellement installés, 0 à enlever et 69 non mis à jour.
Il est nécessaire de prendre 204 ko dans les archives.
Après cette opération, 811 ko d'espace disque supplémentaires seront utilisés.
Réception de :1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 net-tools amd64 2.10-0.1ubuntu4.4 [204
204 ko réceptionnés en 0s (1 106 ko/s)
Sélection du paquet net-tools précédemment désélectionné.
(Lecture de la base de données... 127949 fichiers et répertoires déjà installés.)
Préparation du dépaquetage de .../net-tools_2.10-0.1ubuntu4.4_amd64.deb ...
Dépaquetage de net-tools (2.10-0.1ubuntu4.4) ...
Paramétrage de net-tools (2.10-0.1ubuntu4.4) ...
Traitement des actions différées (« triggers ») pour man-db (2.12.0-4build2) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
```

```
GNU nano 7.2                                     /etc/netdata/netdata.conf
# netdata configuration
#
# You can get the latest version of this file, using:
#
# netdatacli dumpconfig > /etc/netdata/netdata.conf
#
# You can also download it using:
#
# wget -O /etc/netdata/netdata.conf http://localhost:19999/netdata.conf
# or
# curl -o /etc/netdata/netdata.conf http://localhost:19999/netdata.conf
[web]
bind to = 0.0.0.0
```

[Read 13 lines]

GNU nano 7.2 /etc/netdata/netdata.conf

File Edit View Insert Block Text Help

Exit Read File Replace Cut Paste Execute Location Undo Redo Set Mark Copy To Bracket Where Was

```
GNU nano 7.2                                     /etc/netplan/50-cloud-init.yaml
network:
  version: 2
  ethernets:
    enp0s3:
      addresses:
        - "10.0.0.10/24"
      nameservers:
        addresses:
          - 127.0.0.1
        search:
          - ad-innov.local
    enp0s8:
      dhcp4: true
      optional: true
    enp0s9:
      dhcp4: true
      optional: true
```

[Read 17 lines]

GNU nano 7.2 /etc/netplan/50-cloud-init.yaml

File Edit View Insert Block Text Help

Exit Read File Replace Cut Paste Execute Location Undo Redo Set Mark Copy To Bracket Where Was

```
administrateur@samba-ad:~$ ip a | grep enp0s9
4: enp0s9: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    inet 192.168.1.21/24 metric 100 brd 192.168.1.255 scope global dynamic enp0s9
administrateur@samba-ad:~$ sudo netplan apply
```

Pour samba <http://192.168.1.21:19999>

← → ⌂ Non sécurisé 192.168.1.21:19999

Gmail Maps YouTube

samba-ad
v2.5.0-173-nightly

CURRENTLY COLLECTED METRICS

Cloud Status
Available

3 193

NODES

Total 1 Receiving 0 Sending 0 Archived 0

Kernel

Kernel	Kernel version	OS	Id
Linux	6.8.0-60-generic	Ubuntu	ubuntu

OS

Hardware

Cpu cores	Cpu frequency	Ram	Disk	Cpu architecture
1	3.99 GHz	7.76 GB	25 GB	x86_64

Virtualization

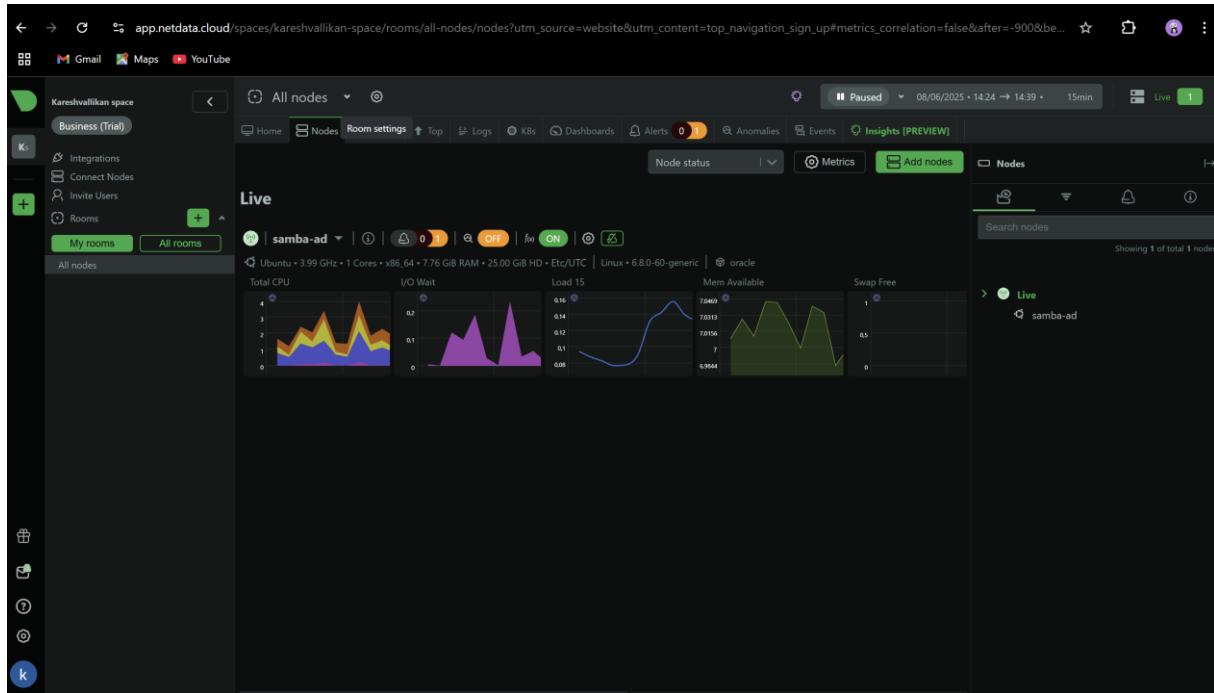
oracle

Netdata UI License

Database System Modules Directories

The screenshot shows the Netdata UI interface on a dark background. At the top, it displays the host name 'samba-ad', version 'v2.5.0-173-nightly', and the URL '192.168.1.21:19999'. A 'Cloud Status' box indicates 'Available'. The main area features a large number '3 193' and a 'NODES' summary with 'Total 1' and zero counts for receiving, sending, and archived nodes. Below this are sections for 'Kernel' (showing Linux and kernel version), 'OS' (Ubuntu), and 'Hardware' (Cpu cores: 1, Cpu frequency: 3.99 GHz, Ram: 7.76 GB, Disk: 25 GB, Cpu architecture: x86_64). There is also a 'Virtualization' section showing 'oracle'. At the bottom, there's a 'Netdata UI License' section and a footer with icons for Database, System, Modules, and Directories. A terminal window at the bottom shows a command being run: 'sudo cat /var/lib/netdata/netdata_random_session_id' followed by its output: '28c3b869-ac73-4362-b15b-7d88e0955895'.

```
administrateur@samba-ad:~$ sudo cat /var/lib/netdata/netdata_random_session_id
28c3b869-ac73-4362-b15b-7d88e0955895
administrateur@samba-ad:~$
```



PC01: Netdata Agent Console

localhost:19999

Cloud Status
Online

CURRENTLY COLLECTED METRICS
1969

NODES

Tier	Resolution	Total 1		Receiving 0		Sending 0		Archived 0		Disk
		Stored	Metrics	Samples	Current	Effective	Configured	Used	Configured	
0	1s	2.0K	142	2m	14d	14d	8 KB	1 GB	—	
1	1m	2.0K	0	2m	3mo	3mo	8 KB	1 GB	—	
2	1h	2.0K	0	2m	5mo14d	2y	8 KB	1 GB	—	

Netdata UI License

Welcome to Netdata

Please sign-in to continue.

Sign-in

Anonymous access to the dashboard of Windows nodes is not allowed.
Please sign in to continue.

Database System Modules Directories

Taper ici pour rechercher

Select room(s)

All nodes

Please run the command below in your terminal:

```
sudo cat /var/lib/netdata/netdata_random_session_id
```

and paste the generated private key in the field below:

```
28c3b869-ac73-4362-b15b-7d88e0955895
```

Clear

Tip: If the command doesn't work out-of-the-box, locate the /var/lib/netdata/netdata_random_session_id file, open it in your favourite text editor, and copy it to your clipboard.

← Back

Claiming...

Sign out to switch user

18°C Ciel couvert 14:56 08/06/2025

X Manage Space / Kareshvallikan space / Rooms / All nodes

Info
Rooms
Nodes
User Management
Alerts & Notifications
Plan & Billing
Integrations
Configurations

Room Nodes Users

Search Status Version Membership Actions

Node	Status	Version	Membership	Actions
PC01	Live	v2.5.3	STATIC	⋮
samba-ad	Live	v2.5.0-173-nightly	STATIC	⋮

INSTALLATION CRON RSYNC POUR LA SAVE

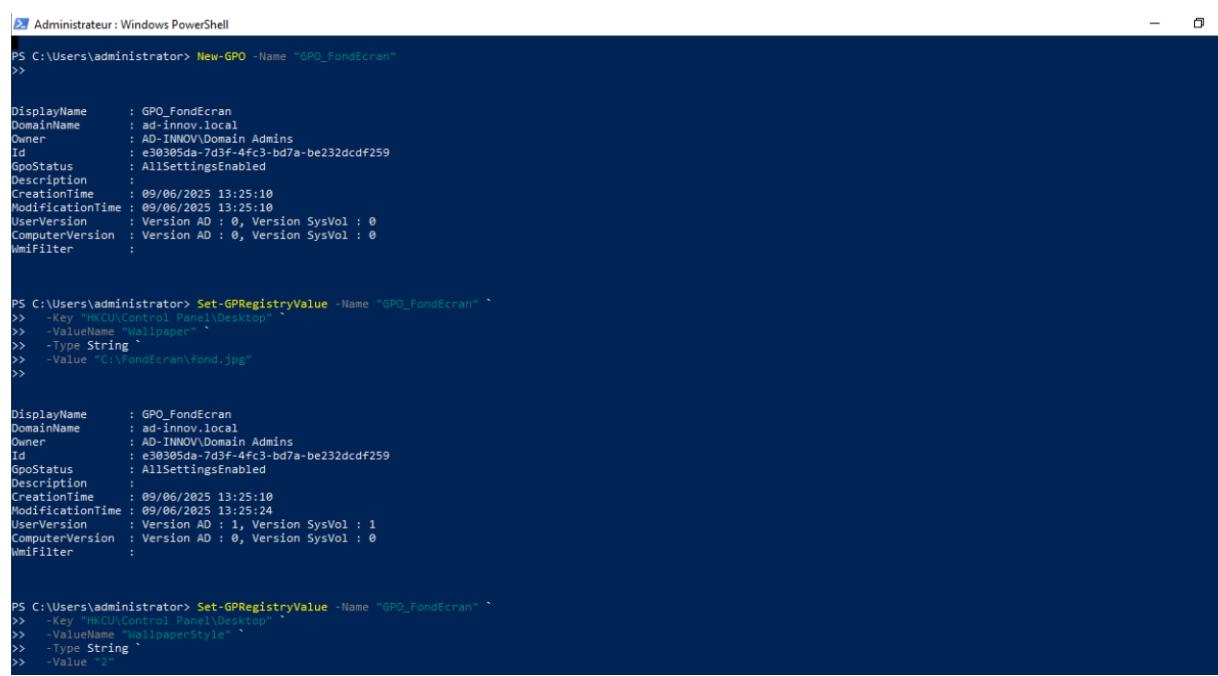
Téléchargé RSAT pour accéder a gpedit.

GO FOND D'ECRAN

```
PS C:\Users\administrator> New-GPO -Name "GPO_FondEcran"
>>

DisplayName      : GPO_FondEcran
DomainName       : ad-innov.local
Owner            : AD-INNOV\Domain Admins
Id               : e30305da-7d3f-4fc3-bd7a-be232dcdf259
GpoStatus        : AllSettingsEnabled
Description       :
CreationTime     : 09/06/2025 13:25:10
ModificationTime : 09/06/2025 13:25:10
UserVersion      : Version AD : 0, Version SysVol : 0
ComputerVersion  : Version AD : 0, Version SysVol : 0
WmiFilter        :

PS C:\Users\administrator> Set-GPRegistryValue -Name "GPO_FondEcran"
>> -Key "HKCU\Control Panel\Desktop"
>> -ValueName "Wallpaper"
>> -Type String
>> -Value "C:\FondEcran\fond.jpg"
>>
```



The screenshot shows a Windows PowerShell window titled 'Administrateur : Windows PowerShell'. The command history is as follows:

```
PS C:\Users\administrator> New-GPO -Name "GPO_FondEcran"
>>

DisplayName      : GPO_FondEcran
DomainName       : ad-innov.local
Owner            : AD-INNOV\Domain Admins
Id               : e30305da-7d3f-4fc3-bd7a-be232dcdf259
GpoStatus        : AllSettingsEnabled
Description       :
CreationTime     : 09/06/2025 13:25:10
ModificationTime : 09/06/2025 13:25:10
UserVersion      : Version AD : 0, Version SysVol : 0
ComputerVersion  : Version AD : 0, Version SysVol : 0
WmiFilter        :

PS C:\Users\administrator> Set-GPRegistryValue -Name "GPO_FondEcran"
>> -Key "HKCU\Control Panel\Desktop"
>> -ValueName "Wallpaper"
>> -Type String
>> -Value "C:\FondEcran\fond.jpg"
>>

DisplayName      : GPO_FondEcran
DomainName       : ad-innov.local
Owner            : AD-INNOV\Domain Admins
Id               : e30305da-7d3f-4fc3-bd7a-be232dcdf259
GpoStatus        : AllSettingsEnabled
Description       :
CreationTime     : 09/06/2025 13:25:10
ModificationTime : 09/06/2025 13:25:10
UserVersion      : Version AD : 0, Version SysVol : 0
ComputerVersion  : Version AD : 0, Version SysVol : 0
WmiFilter        :

PS C:\Users\administrator> Set-GPRegistryValue -Name "GPO_FondEcran"
>> -Key "HKCU\Control Panel\Desktop"
>> -ValueName "WallpaperStyle"
>> -Type String
>> -Value "1"
```

```

PS Administre: Windows PowerShell
>> -Value "2"
>>

DisplayName : GPO_FondEcran
DomainName : ad-innov.local
Owner : AD-INNOV\Domain Admins
Id : e30305da-7d3f-4fc3-bd7a-be232dcdf259
GpoStatus : AllSettingsEnabled
Description :
CreationTime : 09/06/2025 13:25:10
ModificationTime : 09/06/2025 13:25:42
UserVersion : Version AD : 2, Version SysVol : 2
ComputerVersion : Version AD : 0, Version SysVol : 0
WmiFilter :

PS C:\Users\administrator> New-GPLink -Name "GPO_FondEcran" -Target "DC=ad-innov,DC=local"
>>

GpoId : e30305da-7d3f-4fc3-bd7a-be232dcdf259
DisplayName : GPO_FondEcran
Enabled : True
Enforced : False
Target : DC=ad-innov,DC=local
Order : 3

PS C:\Users\administrator> Get-GPLink -Domain "ad-innov.local" -Target "DC=ad-innov,DC=local"

PS C:\Users\administrator> gpupdate /force
>>
Mise à jour de la stratégie...

La mise à jour de la stratégie d'ordinateur s'est terminée sans erreur.
La mise à jour de la stratégie utilisateur s'est terminée sans erreur.

PS C:\Users\administrator>

```

Mettre nextcloud-ad.innov-local

samba

```

administrateur@samba-ad:~$ samba-tool dns add ad1.ad-innov.local ad-innov.local nextcloud A 10.0.0.30 -U administrator
WARNING: Using passwords on command line is insecure. Installing the setproctitle python module will hide these from shortly after program start.
Password for [AD-INNOV]\administrator:
Record added successfully
administrateur@samba-ad:~$ sudo systemctl restart samba-ad-dc
[sudo] password for administrateur:
administrateur@samba-ad:~$ 

```

Édite le fichier de config de Nextcloud

```

admincloud@srv-nextcloud:~$ sudo find / -name config.php 2>/dev/null | grep nextcloud
/var/www/nextcloud/config/config.php
admincloud@srv-nextcloud:~$ sudo nano /var/www/nextcloud/config/config.php
admincloud@srv-nextcloud:~$ 

```

```
2. 127.0.0.1 (admincloud) × 3. 127.0.0.1 (zabbixadmin) × 4. 192.168.1.21 (administrateur) × + /var/www/nextcloud/config/config.php  
GNU nano 7.2  
<?php  
$CONFIG = array ( 'instanceid' => 'ocggfoc9f1h2', 'passwordsalt' => 'v7yzZC1PVzZ1nBdbHiq+dsKBk8L8mr', 'secret' => 'XSf5dAzCUQwfqqeIS61fxhVivSGJid4WN2Axp6MydtRThe6', 'trusted_domains' => [array ( 0 => '10.0.0.30', ), 'datadirectory' => '/var/www/nextcloud/data', 'dbtype' => 'mysql', 'version' => '31.0.5.1', 'overwrite.cli.url' => 'http://10.0.0.30', 'dbname' => 'nextcloud', 'dbhost' => 'localhost', 'dbport' => '', 'dbtableprefix' => 'oc_', 'mysql.utf8mb4' => true, 'dbuser' => 'nextclouduser', 'dbpassword' => 'Karesh2003!!!!', 'installed' => true, 'ldapProviderFactory' => '0CA\\User_LDAP\\LDAPProviderFactory', );
```

```
2. 127.0.0.1 (admincloud) × 3. 127.0.0.1 (zabbixadmin) × 4. 192.168.1.21 (administrateur) × + /var/www/nextcloud/config/config.php *  
GNU nano 7.2  
<?php  
$CONFIG = array ( 'instanceid' => 'ocggfoc9f1h2', 'passwordsalt' => 'v7yzZC1PVzZ1nBdbHiq+dsKBk8L8mr', 'secret' => 'XSf5dAzCUQwfqqeIS61fxhVivSGJid4WN2Axp6MydtRThe6', 'trusted_domains' => [array ( 0 => 'localhost', 1 => '10.0.0.30', 2 => 'nextcloud.ad-innov.local', ), 'datadirectory' => '/var/www/nextcloud/data', 'dbtype' => 'mysql', 'version' => '31.0.5.1', 'overwrite.cli.url' => 'http://10.0.0.30', 'dbname' => 'nextcloud', 'dbhost' => 'localhost', 'dbport' => '', 'dbtableprefix' => 'oc_', 'mysql.utf8mb4' => true, 'dbuser' => 'nextclouduser', 'dbpassword' => 'Karesh2003!!!!', 'installed' => true, 'ldapProviderFactory' => '0CA\\User_LDAP\\LDAPProviderFactory', );
```

```
2. 127.0.0.1 (admincloud) × 3. 127.0.0.1 (zabbixadmin) × 4. 192.168.1.21 (administrateur) × +  
admincloud@srv-nextcloud:~$ sudo find / -name config.php 2>/dev/null | grep nextcloud  
/var/www/nextcloud/config/config.php  
admincloud@srv-nextcloud:~$ sudo nano /var/www/nextcloud/config/config.php  
admincloud@srv-nextcloud:~$ sudo systemctl restart apache2  
admincloud@srv-nextcloud:~$
```

Raccourcis nextcloud sur tout les bureaux

```
Administrator : Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. Tous droits réservés.

Testez le nouveau système multiplateforme PowerShell https://aka.ms/pscore6

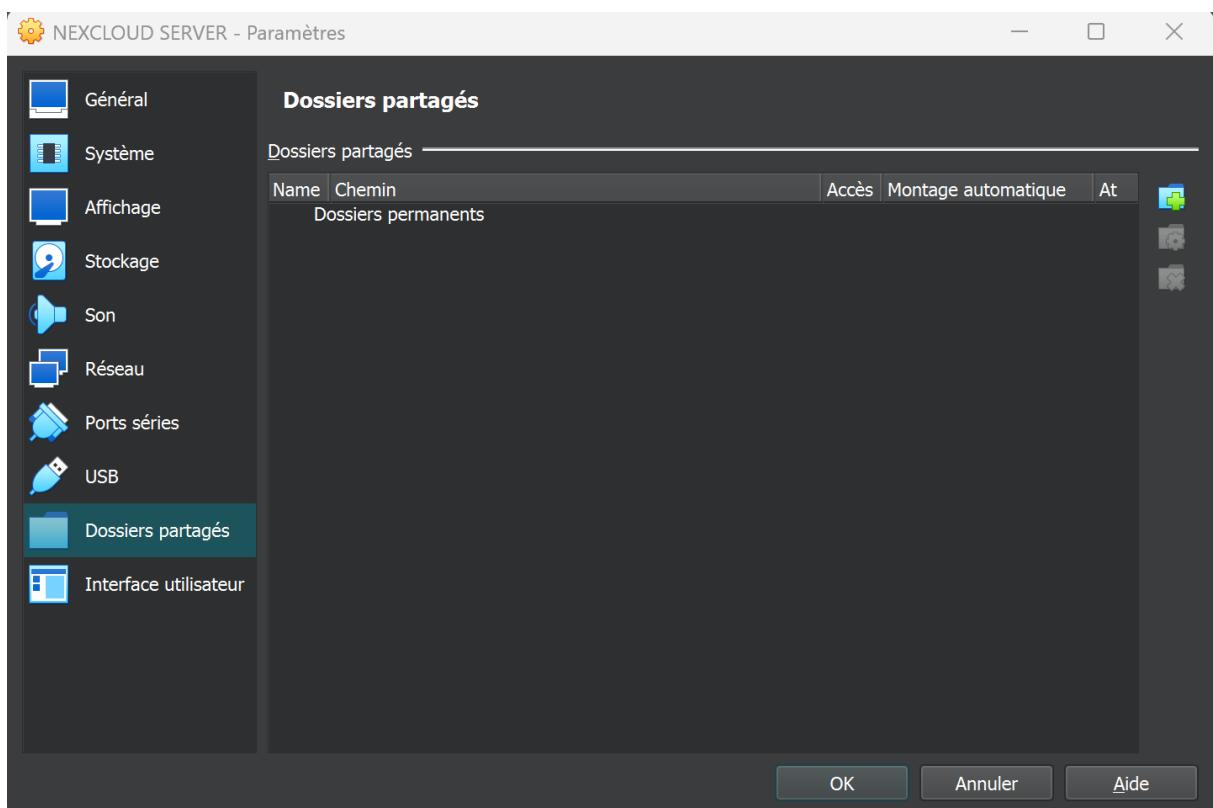
PS C:\Users\administrator> $publicDesktop = "C:\Users\Public\Desktop"
>> $shortcutPath = Join-Path $publicDesktop "Nextcloud.lnk"
>>
>> $WshShell = New-Object -ComObject WScript.Shell
>> $Shortcut = $WshShell.CreateShortcut($shortcutPath)
>> $Shortcut.TargetPath = "http://nextcloud.ad-innov.local/"
>> $Shortcut.IconLocation = "C:\ad-ico\innov.ico"
>> $Shortcut.Save()
>>
PS C:\Users\administrator> ■
```

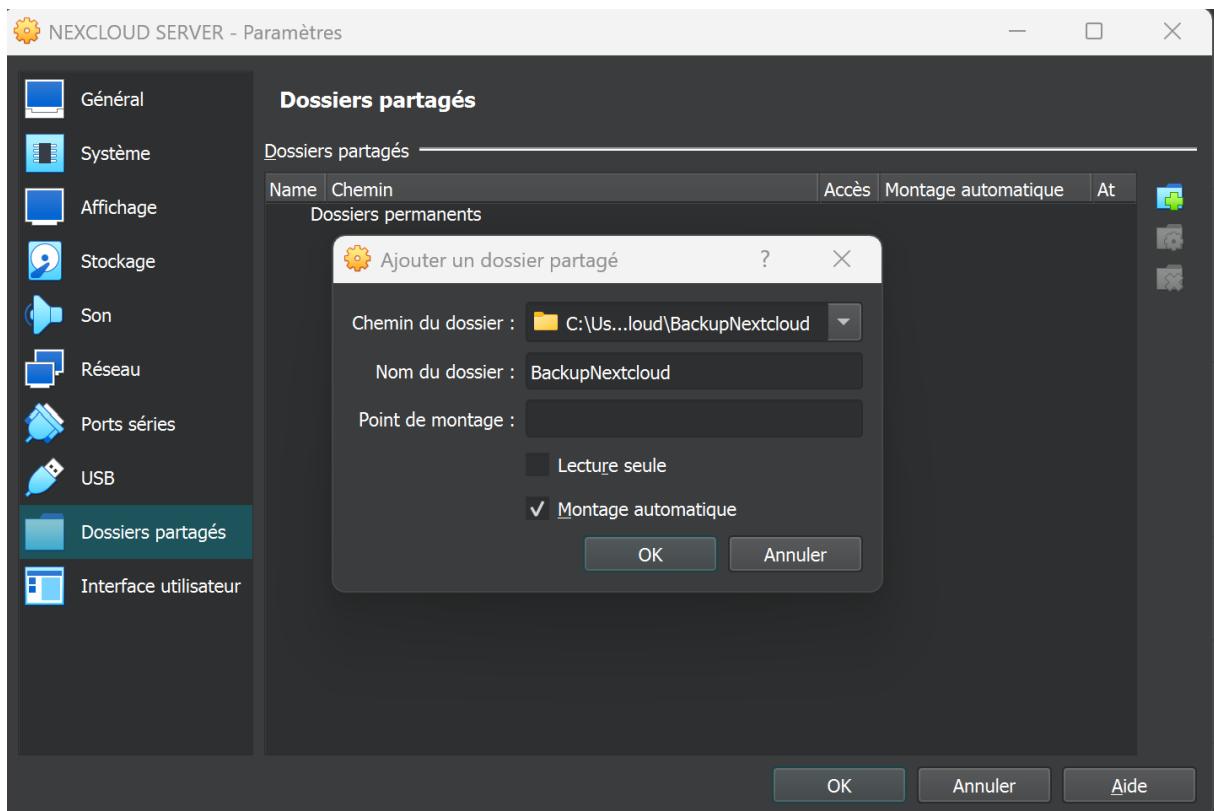
CRON RSYNC

Va dans **Paramètres → Dossiers partagés**

Clique sur + (Ajouter un dossier partagé)

- **Chemin du dossier** : sélectionne le dossier que tu as créé (ex : backNextcloud)
- **Nom du dossier** : sauvegarde
- Coche **Montage automatique**
- Coche **Rendre permanent**





Démarrer la VM et installer les "Guest Additions"

`sudo apt update`

`sudo apt install build-essential dkms linux-headers-$(uname -r)`

```
admincloud@srv-nextcloud:~$ ^C
admincloud@srv-nextcloud:~$ sudo apt update
[sudo] password for admincloud:
Sorry, try again.
[sudo] password for admincloud:
Réception de :1 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Atteint :2 http://archive.ubuntu.com/ubuntu noble InRelease
Réception de :3 http://repository.netdata.cloud/repos/edge/ubuntu noble/ InRelease [2 054 B]
Réception de :4 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Atteint :5 http://repository.netdata.cloud/repos/repoconfig/ubuntu noble/ InRelease
Atteint :6 https://repo.zabbix.com/zabbix/7.0/ubuntu jammy InRelease
Réception de :7 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Réception de :8 http://repository.netdata.cloud/repos/edge/ubuntu noble/ Packages [83,8 kB]
Réception de :9 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [868 kB]
Réception de :10 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [1 118 kB]
Réception de :11 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [160 kB]
Réception de :12 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21,5 kB]
Réception de :13 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
Réception de :14 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [840 kB]
```

Dans VirtualBox → Périphériques → Insérer l'image CD des Additions invité

Monte le CD et installe

`sudo mkdir /mnt/cdrom`

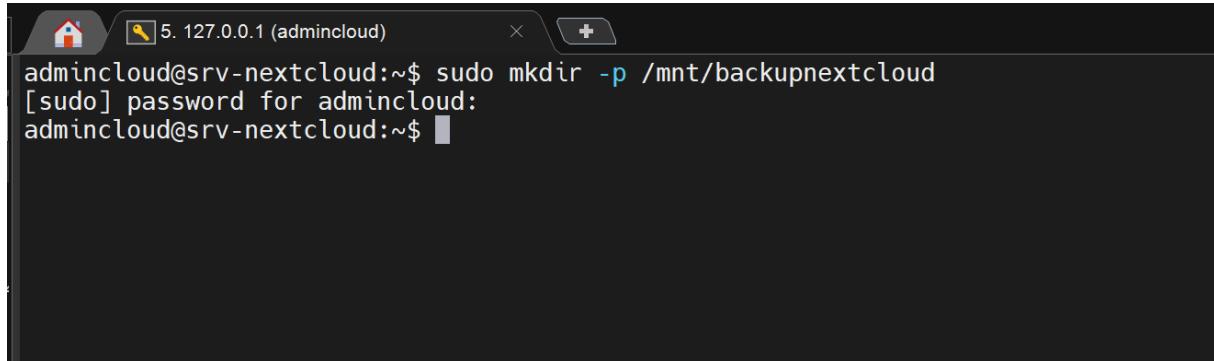
`sudo mount /dev/cdrom /mnt/cdrom`

`sudo /mnt/cdrom/VBoxLinuxAdditions.run`

```
admincloud@srv-nextcloud:~$ sudo mkdir /mnt/cdrom
sudo mount /dev/cdrom /mnt/cdrom
sudo /mnt/cdrom/VBoxLinuxAdditions.run
mkdir: cannot create directory '/mnt/cdrom': File exists
mount: /mnt/cdrom: WARNING: source write-protected, mounted read-only.
Verifying archive integrity... 100% MD5 checksums are OK. All good.
Uncompressing VirtualBox 7.0.22 Guest Additions for Linux 100%
VirtualBox Guest Additions installer
Removing installed version 7.0.22 of VirtualBox Guest Additions...
update-initramfs: Generating /boot/initrd.img-6.8.0-60-generic
Copying additional installer modules ...
Installing additional modules ...
VirtualBox Guest Additions: Starting.
VirtualBox Guest Additions: Setting up modules
VirtualBox Guest Additions: Building the VirtualBox Guest Additions kernel
modules. This may take a while.
VirtualBox Guest Additions: To build modules for other installed kernels, run
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup <version>
VirtualBox Guest Additions: or
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup all
VirtualBox Guest Additions: Building the modules for kernel 6.8.0-60-generic.
update-initramfs: Generating /boot/initrd.img-6.8.0-60-generic
admincloud@srv-nextcloud:~$
```

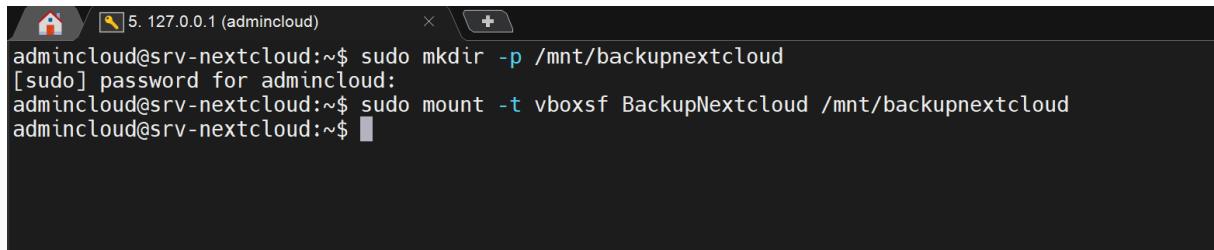
Sudo reboot

Dans ta VM, crée un point de montage :



```
5. 127.0.0.1 (admincloud)
admincloud@srv-nextcloud:~$ sudo mkdir -p /mnt/backupnextcloud
[sudo] password for admincloud:
admincloud@srv-nextcloud:~$
```

Puis monte le partage



```
5. 127.0.0.1 (admincloud)
admincloud@srv-nextcloud:~$ sudo mkdir -p /mnt/backupnextcloud
[sudo] password for admincloud:
admincloud@srv-nextcloud:~$ sudo mount -t vboxsf BackupNextcloud /mnt/backupnextcloud
admincloud@srv-nextcloud:~$
```

sudo ln -s /mnt/backupnextcloud /mnt/partage-sauvegarde

```
5. 127.0.0.1 (admincloud)
admincloud@srv-nextcloud:~$ sudo ln -s /mnt/backupnextcloud /mnt/partage-sauvegarde
admincloud@srv-nextcloud:~$ sudo ln -s /mnt/backupnextcloud /mnt/partage-sauvegarde
```

```
5. 127.0.0.1 (admincloud)
admincloud@srv-nextcloud:~$ sudo nano /usr/local/bin/backup_nextcloud.sh
admincloud@srv-nextcloud:~$
```

```
GNU nano 7.2                               /usr/local/bin/backup_nextcloud.sh *
#!/bin/bash

# === Variables ===
DATE=$(date +%F_%H%M)
DEST="/mnt/backupnextcloud/nextcloud_${DATE}"
DB_NAME="nextcloud"
DB_USER="root"
DB_PASS="Karesh2003!"

# === Création du dossier de destination ===
mkdir -p "$DEST"

# === 1. Sauvegarde base de données ===
mysqldump -u "$DB_USER" -p"$DB_PASS" "$DB_NAME" > "$DEST/db.sql"

# === 2. Sauvegarde fichiers utilisateurs ===
rsync -a /var/www/nextcloud/data/ "$DEST/data/"

# === 3. Sauvegarde config Nextcloud ===
mkdir -p "$DEST/config"
cp /var/www/nextcloud/config/config.php "$DEST/config/"

# === 4. Propriété ===
chown -R root:root "$DEST"
```

Rends le script exécutable

```
5. 127.0.0.1 (admincloud)
admincloud@srv-nextcloud:~$ sudo chmod +x /usr/local/bin/backup_nextcloud.sh
admincloud@srv-nextcloud:~$
```

Teste la sauvegarde manuellement

```
5. 127.0.0.1 (admincloud)
admincloud@srv-nextcloud:~$ sudo /usr/local/bin/backup_nextcloud.sh
admincloud@srv-nextcloud:~$
```

ls /mnt/backupnextcloud

```
admincloud@srv-nextcloud:~$ ls /mnt/backupnextcloud
nextcloud_2025-06-09_16h21
admincloud@srv-nextcloud:~$
```

La sauvegarde a bien fonctionné

Ajoute ceci à la fin de ton script backup_nextcloud.sh

```
# === 5. Nettoyage des sauvegardes de +7 jours ===
```

```
find /mnt/backupnextcloud/ -type d -name "nextcloud_*" -mtime +7 -exec rm -rf {} \;
```

1. Le contenu du script :

```
cat /usr/local/bin/backup_nextcloud.sh
```

2. Le résultat de l'exécution :

```
sudo /usr/local/bin/backup_nextcloud.sh
```

```
ls /mnt/backupnextcloud
```

Tu y verras un dossier nommé nextcloud_2025-06-09_16h21, etc.

3. Contenu de la sauvegarde :

```
tree /mnt/backupnextcloud/nextcloud_2025-06-09_16h21
```

Tu verras :

- db.sql (dump MySQL)
- data/ (fichiers utilisateurs)
- config/config.php (fichier de config)

J'ai automatisé la sauvegarde de Nextcloud avec un script Bash dans /usr/local/bin. Il sauvegarde chaque jour la base de données, les fichiers utilisateurs, et la configuration de Nextcloud. La sauvegarde est stockée dans un dossier monté avec VirtualBox partagé vers ma machine hôte. J'utilise cron pour lancer le script tous les jours automatiquement.

```
0 directories, 1 file
admincloud@srv-nextcloud:~$ sudo ls -l /mnt/backupnextcloud/nextcloud_2025-06-09_16h21
total 768
drwxrwxrwx 1 root root      0 juin   9 16:21 config
drwxrwxrwx 1 root root    4096 juin   8 11:42 data
-rwxrwxrwx 1 root root 781671 juin   9 16:21 db.sql
admincloud@srv-nextcloud:~$ █
```

GPO WINDOWS

```

0 directories, 1 file
admincloud@srv-nextcloud:~$ sudo ls -l /mnt/backupnextcloud/nextcloud_2025-06-09_16h21
total 768
drwxrwxrwx 1 root root      0 juin   9 16:21 config
drwxrwxrwx 1 root root  4096 juin   8 11:42 data
-rwxrwxrwx 1 root root 781671 juin   9 16:21 db.sql
admincloud@srv-nextcloud:~$ sudo cat /mnt/backupnextcloud/nextcloud_2025-06-09_16h21/db.sql | head
/*M!999999\*- enable the sandbox mode */
-- MariaDB dump 10.19 Distrib 10.11.13-MariaDB, for debian-linux-gnu (x86_64)
--
-- Host: localhost      Database: nextcloud
-- 
-- Server version      10.11.13-MariaDB-0ubuntu0.24.04.1

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
admincloud@srv-nextcloud:~$ sudo ls /mnt/backupnextcloud/nextcloud_2025-06-09_16h21/data
145BB502-9D1E-488F-9E5B-5768A3E09419  9E7A940A-7681-4DCD-887E-9A8930E7630E  F5990283-A233-4C8D-80F4-9DB793014160
75A0A3B6-B3AF-4504-84CE-90967FD45516  admin                                index.html
770988DD-E492-4FA6-81B2-B1C1A74E9EAC  appdata_ocggfoc9f1h2                  nextcloud.log
admincloud@srv-nextcloud:~$ █

```

Le dossier data/

Il contient les **fichiers personnels des utilisateurs**, comme ceux de admin, appdata_*, etc.

J'ai mis en place un script automatique qui sauvegarde : la base de données de Nextcloud (db.sql), les fichiers utilisateurs (data/) et la configuration (config.php). Ces éléments sont copiés dans un dossier horodaté, redirigé vers un partage VirtualBox. La preuve : on voit les trois éléments sauvegardés dans /mnt/backupnextcloud/..., ce qui garantit une restauration complète.

Automatiser avec cron

sudo crontab -e

```

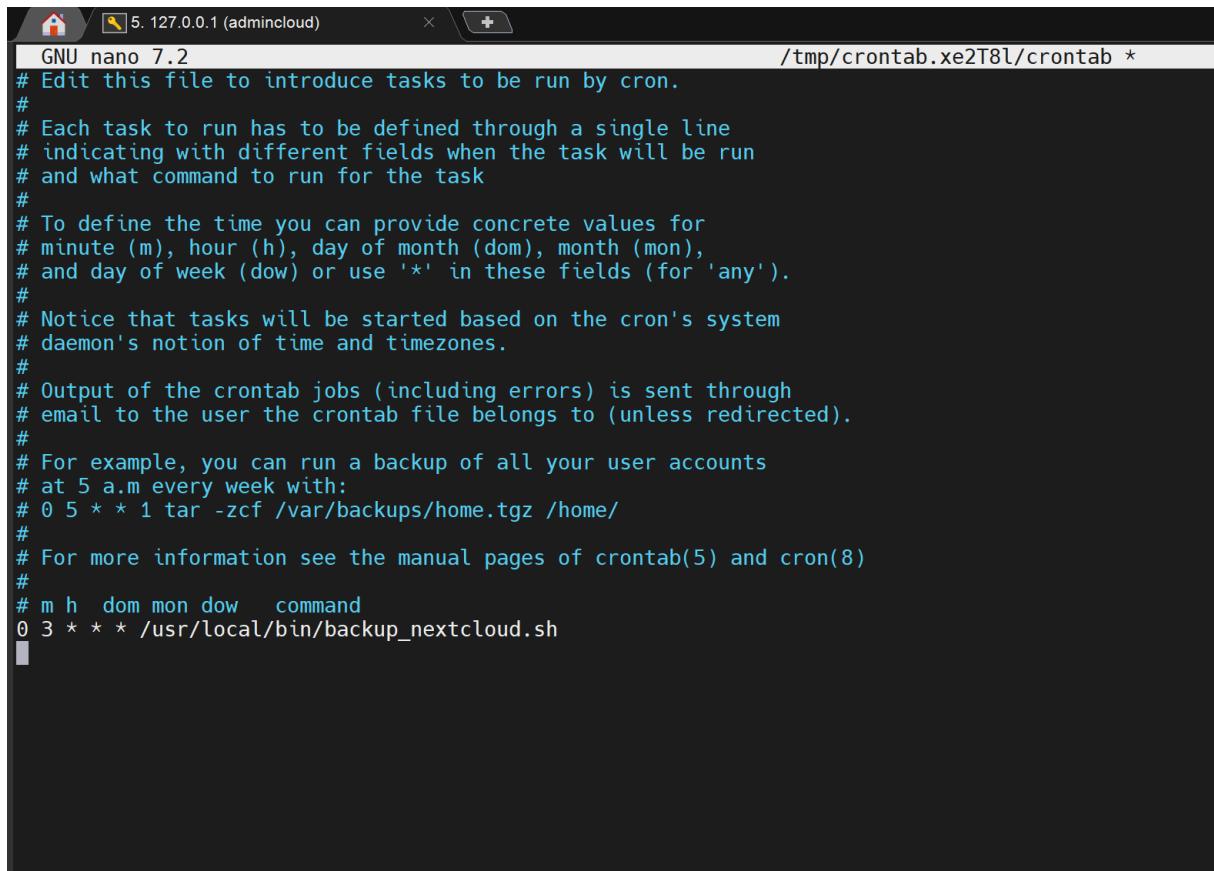
5. 127.0.0.1 (admincloud) × + ↻
admincloud@srv-nextcloud:~$ sudo crontab -e
no crontab for root - using an empty one

Select an editor. To change later, run 'select-editor'.
 1. /bin/nano      <---- easiest
 2. /usr/bin/vim.basic
 3. /usr/bin/vim.tiny
 4. /bin/ed

Choose 1-4 [1]: █

```

Tape 1

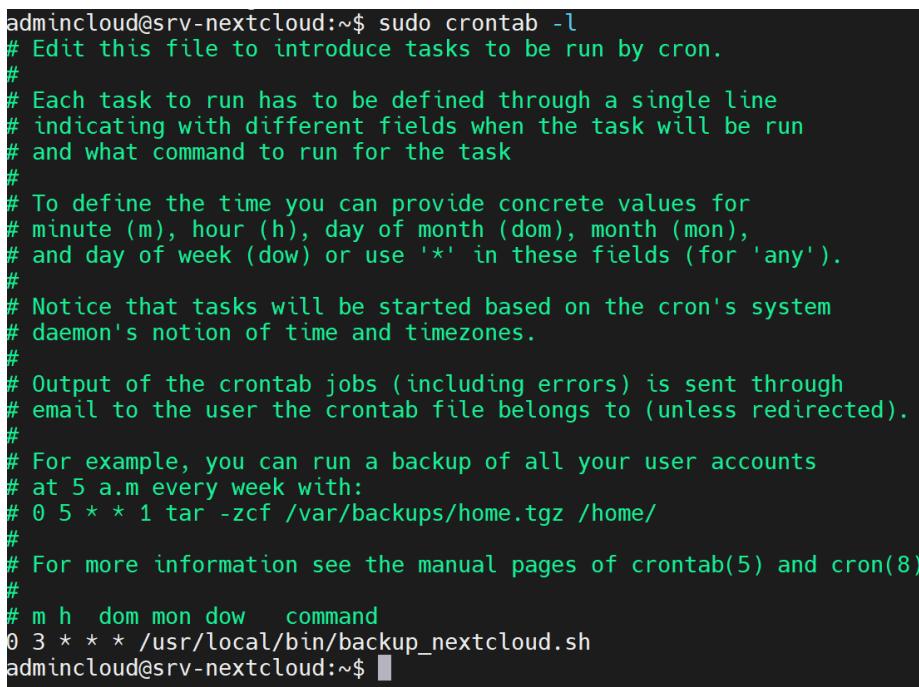


The screenshot shows a terminal window titled "5. 127.0.0.1 (admincloud)". The command "GNU nano 7.2" is displayed at the top. The text area contains the crontab configuration file with the following content:

```
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow   command
0 3 * * * /usr/local/bin/backup_nextcloud.sh
```

Cela signifie : **tous les jours à 3h00 du matin**, ton script de sauvegarde sera lancé automatiquement.

sudo crontab -l



The screenshot shows a terminal window with the command "admincloud@srv-nextcloud:~\$ sudo crontab -l" entered. The output displays the same crontab configuration as the previous screenshot, confirming the scheduled task:

```
admincloud@srv-nextcloud:~$ sudo crontab -l
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').
#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow   command
0 3 * * * /usr/local/bin/backup_nextcloud.sh
```

Voici le tutoriel complet pour mettre en place une sauvegarde automatique de Nextcloud dans une VM Linux (Ubuntu Server) avec cron et rsync.

1. Créer un dossier partagé entre la VM et l'hôte

1. Dans **VirtualBox** > Paramètres de la VM Nextcloud > "Dossiers partagés".
 2. Ajouter un dossier permanent pointant vers C:\Users\Karesh\Documents\Nextcloud\BackupNextcloud (par exemple).
 3. Nommer-le : BackupNextcloud
 4. Cocher "Montage automatique" et "Accès complet".
-

2. Monter ce dossier dans la VM

```
sudo mkdir -p /mnt/backupnextcloud  
sudo mount -t vboxsf BackupNextcloud /mnt/backupnextcloud  
(Si besoin → installer les "Guest Additions")
```

3. Créer un lien symbolique plus lisible (facultatif)

```
sudo ln -s /mnt/backupnextcloud /mnt/partage-sauvegarde
```

4. Créer le script de sauvegarde

```
sudo nano /usr/local/bin/backup_nextcloud.sh
```

Et coller ceci :

```
#!/bin/bash
```

```
# === Variables ===
```

```
DATE=$(date +%F_%H%M)  
DEST="/mnt/backupnextcloud/nextcloud_${DATE}"  
DB_NAME="nextcloud"  
DB_USER="root"
```

```
DB_PASS="Karesh2003!"  
  
# === Création du dossier de destination ===  
mkdir -p "$DEST"  
  
# === 1. Sauvegarde de la base de données ===  
mysqldump -u "$DB_USER" -p"$DB_PASS" "$DB_NAME" > "$DEST/db.sql"  
  
# === 2. Sauvegarde des données utilisateurs ===  
rsync -a /var/www/nextcloud/data/ "$DEST/data/"  
  
# === 3. Sauvegarde du fichier de config ===  
mkdir -p "$DEST/config"  
cp /var/www/nextcloud/config/config.php "$DEST/config/"  
  
# === 4. Droits ===  
chown -R root:root "$DEST"  
Enregistrer : Ctrl + O, puis quitter : Ctrl + X
```

💡 5. Rendre le script exécutable

```
sudo chmod +x /usr/local/bin/backup_nextcloud.sh
```

💡 6. Tester la sauvegarde manuellement

```
sudo /usr/local/bin/backup_nextcloud.sh
```

Puis vérifier le répertoire /mnt/backupnextcloud/ ou /mnt/partage-sauvegarde/

⌚ 7. Planifier la sauvegarde automatique (via cron)

```
echo "0 3 * * * /usr/local/bin/backup_nextcloud.sh" | sudo crontab -
```

Cela lance le script tous les jours à 3h00 du matin.

8. Vérifier que la crontab a bien été prise en compte

```
sudo crontab -l
```

Bonus : prouver à l'examinateur

- Montre le contenu du script :

```
cat /usr/local/bin/backup_nextcloud.sh
```

- Montre les dossiers de backup :

```
ls -l /mnt/backupnextcloud/
```

- Affiche le contenu SQL :

```
head /mnt/backupnextcloud/nextcloud_*/db.sql
```

- Montre la crontab root :

```
sudo crontab -l
```

Ce tutoriel est 100% fonctionnel pour prouver l'automatisation d'une sauvegarde Nextcloud dans une architecture virtualisée avec VirtualBox. Tu peux le copier dans ton rapport ou l'imprimer pour l'examen E6.