Compte Rendu Azure

Création de la VM WIKIJS

Voici des paramètres à inclure ou à modifier dans le cadre de la création de la VM :

- Groupe de ressources (ici Pool-TP-R5)
- Nom de la VM (ici VM-WIKIJS)
- Région : Norway East
- Image : Rocky Linux 9 with LVM – x64 de 2e génération
- Taille : Standard_B1s – 1 processeur virtuel, 1Gio de mémoire
- Port d'entrée pour l'adm
- Port d'entrée pour administration : SSH (22)
- Disque : HDD

Installation de WikiJS

On commence par exécuter ces commandes :

- sudo groupadd --system wiki (création d'un groupe system appelé wiki)
- sudo useradd -s /sbin/nologin --system -g wiki wiki (ajout d'un utilisateur système pour le groupe wiki)
- sudo yum install epel-release

On crée un fichier swap pour résoudre les problèmes de mémoire :

```
[bludoh-joachim@VM-WIKIJS ~]$ sudo chmod 600 /swapfile
[bludoh-joachim@VM-WIKIJS ~]$ ls -lh /swapfile
-rw-------. 1 root root 1.0G Oct 31 15:03 /swapfile
[bludoh-joachim@VM-WIKIJS ~]$ sudo mkswap /swapfile
Setting up swapspace version 1, size = 1024 MiB (1073737728 bytes)
no label, UUID=57eb5f7e-91d8-4fa7-8578-d9396aedacc0
[bludoh-joachim@VM-WIKIJS ~]$ sudo swapon /swapfile
[bludoh-joachim@VM-WIKIJS ~]$ echo '/swapfile none swap sw 0 0' | sudo tee -a /etc/fstab
```

```
[bludoh-joachim@VM-WIKIJS ~]$ echo '/swapfile none swap sw 0 0' | sudo tee -a /etc/fstab
/swapfile none swap sw 0 0
```

Installation de nano :

```
[bludoh-joachim@VM-WIKIJS ~]$ sudo dnf install nano
Last metadata expiration check: 0:02:05 ago on Fri 07 Nov 2025 12:52:57 PM UTC.
Dependencies resolved.
================================================================================
 Package             Architecture          Version                   Repository              Size
================================================================================
Installing:
 nano                x86_64                5.6.1-7.el9               baseos                 691 k

Transaction Summary
================================================================================
Install  1 Package

Total download size: 691 k
Installed size: 2.7 M
Is this ok [y/N]: y
Downloading Packages:
nano-5.6.1-7.el9.x86_64.rpm                                 639 kB/s | 691 kB     00:01
```

```
Installed:
  nano-5.6.1-7.el9.x86_64
```

Lancement de la commande :

```
[bludoh-joachim@VM-WIKIJS ~]$ sudo yum install -y git vim wget curl unzip socat mariadb-server nodejs nginx redis
Last metadata expiration check: 0:06:05 ago on Fri 07 Nov 2025 12:52:57 PM UTC.
Package curl-7.76.1-31.el9.x86_64 is already installed.
Dependencies resolved.
================================================================================
 Package                Architecture    Version                    Repository          Size
================================================================================
Installing:
 git                    x86_64          2.47.3-1.el9_6             appstream           50 k
 mariadb-server         x86_64          3:10.5.27-1.el9_5.0.2      appstream          9.7 M
 nginx                  x86_64          2:1.20.1-22.el9_6.3        appstream           36 k
 nodejs                 x86_64          1:16.20.2-8.el9_4          appstream          111 k
 redis                  x86_64          6.2.19-1.el9_6             appstream          1.3 M
 socat                  x86_64          1.7.4.1-6.el9_6.1          appstream          299 k
 unzip                  x86_64          6.0-58.el9_5               baseos             180 k
 vim-enhanced           x86_64          2:8.2.2637-22.el9_6.1      appstream          1.7 M
 wget                   x86_64          1.21.1-8.el9_4             appstream          768 k
Upgrading:
```

```
  redis-6.2.19-1.el9_6.x86_64                  rocky-logos-httpd-90.16-1.el9.noarch
  socat-1.7.4.1-6.el9_6.1.x86_64               unzip-6.0-58.el9_5.x86_64
  vim-common-2:8.2.2637-22.el9_6.1.x86_64      vim-enhanced-2:8.2.2637-22.el9_6.1.x86_64
  vim-filesystem-2:8.2.2637-22.el9_6.1.noarch  wget-1.21.1-8.el9_4.x86_64

Complete!
[bludoh-joachim@VM-WIKIJS ~]$
```

Installation WikiJS :

```
[bludoh-joachim@VM-WIKIJS ~]$ cd ..
[bludoh-joachim@VM-WIKIJS home]$ cd ..
[bludoh-joachim@VM-WIKIJS /]$ ls
afs  boot  etc   home  lib64  mnt  proc  run   srv   sys  usr
bin  dev   grub2 lib   media  opt  root  sbin  swapfile  tmp  var
[bludoh-joachim@VM-WIKIJS /]$ pwd
/
[bludoh-joachim@VM-WIKIJS /]$ cd /srv
[bludoh-joachim@VM-WIKIJS srv]$ sudo mkdir wiki
```

```
[bludoh-joachim@VM-WIKIJS srv]$ sudo wget https://github.com/Requarks/wiki/releases/latest/download/wi
ki-js.tar.gz
--2025-11-07 13:12:15--  https://github.com/Requarks/wiki/releases/latest/download/wiki-js.tar.gz
Resolving github.com (github.com)... 140.82.121.4
Connecting to github.com (github.com)|140.82.121.4|:443... connected.
HTTP request sent, awaiting response... 302 Found
```

```
Length: 84933287 (81M) [application/octet-stream]
Saving to: 'wiki-js.tar.gz'

wiki-js.tar.gz           100%[=================================>]  81.00M   106MB/s    in 0.8s

2025-11-07 13:12:16 (106 MB/s) - 'wiki-js.tar.gz' saved [84933287/84933287]
```

```
[bludoh-joachim@VM-WIKIJS srv]$ sudo tar xzf wiki-js.tar.gz -C ./wiki
[bludoh-joachim@VM-WIKIJS srv]$
```

```
[bludoh-joachim@VM-WIKIJS srv]$ cd ./wiki
[bludoh-joachim@VM-WIKIJS wiki]$
```

Démarrage et configuration de MySQL :

```
[bludoh-joachim@VM-WIKIJS wiki]$ sudo systemctl start mariadb
[bludoh-joachim@VM-WIKIJS wiki]$ mysql_secure_installation
```

```
Normally, root should only be allowed to connect from 'localhost'.  This
ensures that someone cannot guess at the root password from the network.

Disallow root login remotely? [Y/n] Y
 ... Success!

By default, MariaDB comes with a database named 'test' that anyone can
access.  This is also intended only for testing, and should be removed
before moving into a production environment.

Remove test database and access to it? [Y/n] Y
 - Dropping test database...
 ... Success!
 - Removing privileges on test database...
 ... Success!

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.

Reload privilege tables now? [Y/n] Y
 ... Success!

Cleaning up...

All done!  If you've completed all of the above steps, your MariaDB
installation should now be secure.

Thanks for using MariaDB!
[bludoh-joachim@VM-WIKIJS wiki]$
```

Authentification :

```
[bludoh-joachim@VM-WIKIJS wiki]$ mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 19
Server version: 10.5.27-MariaDB MariaDB Server

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)]>
```

```
MariaDB [(none)]> CREATE USER 'wiki'@'localhost' IDENTIFIED BY 'Def@ultP@ssword';
Query OK, 0 rows affected (0.004 sec)
```

```
MariaDB [(none)]> CREATE DATABASE dbwiki;
Query OK, 1 row affected (0.000 sec)
```

```
MariaDB [(none)]> GRANT ALL PRIVILEGES ON dbwiki.* TO 'wiki'@'localhost';
Query OK, 0 rows affected (0.005 sec)
```

```
MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.001 sec)
```

SHOW DATABASES;

```
MariaDB [(none)]> CREATE USER 'wiki'@'localhost' IDENTIFIED BY 'Def@ultP@ssword';
Query OK, 0 rows affected (0.004 sec)

MariaDB [(none)]> CREATE DATABASE dbwiki;
Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> GRANT ALL PRIVILEGES ON dbwiki.* TO 'wiki'@'localhost';
Query OK, 0 rows affected (0.005 sec)

MariaDB [(none)]> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.001 sec)
```

SHOW GRANTS;

```
MariaDB [(none)]> SHOW GRANTS FOR 'wiki'@'localhost';
+---------------------------------------------------------------------------------------------------------------+
| Grants for wiki@localhost                                                                                     |
+---------------------------------------------------------------------------------------------------------------+
| GRANT USAGE ON *.* TO `wiki`@`localhost` IDENTIFIED BY PASSWORD '*C0AD2B9E68C045E8F8DFDF291B516027F10FB114' |
| GRANT ALL PRIVILEGES ON `dbwiki`.* TO `wiki`@`localhost`                                                      |
+---------------------------------------------------------------------------------------------------------------+
2 rows in set (0.000 sec)
```

```
MariaDB [(none)]> exit
Bye
[bludoh-joachim@VM-WIKIJS ~]$ sudo systemctl enable --now redis
```

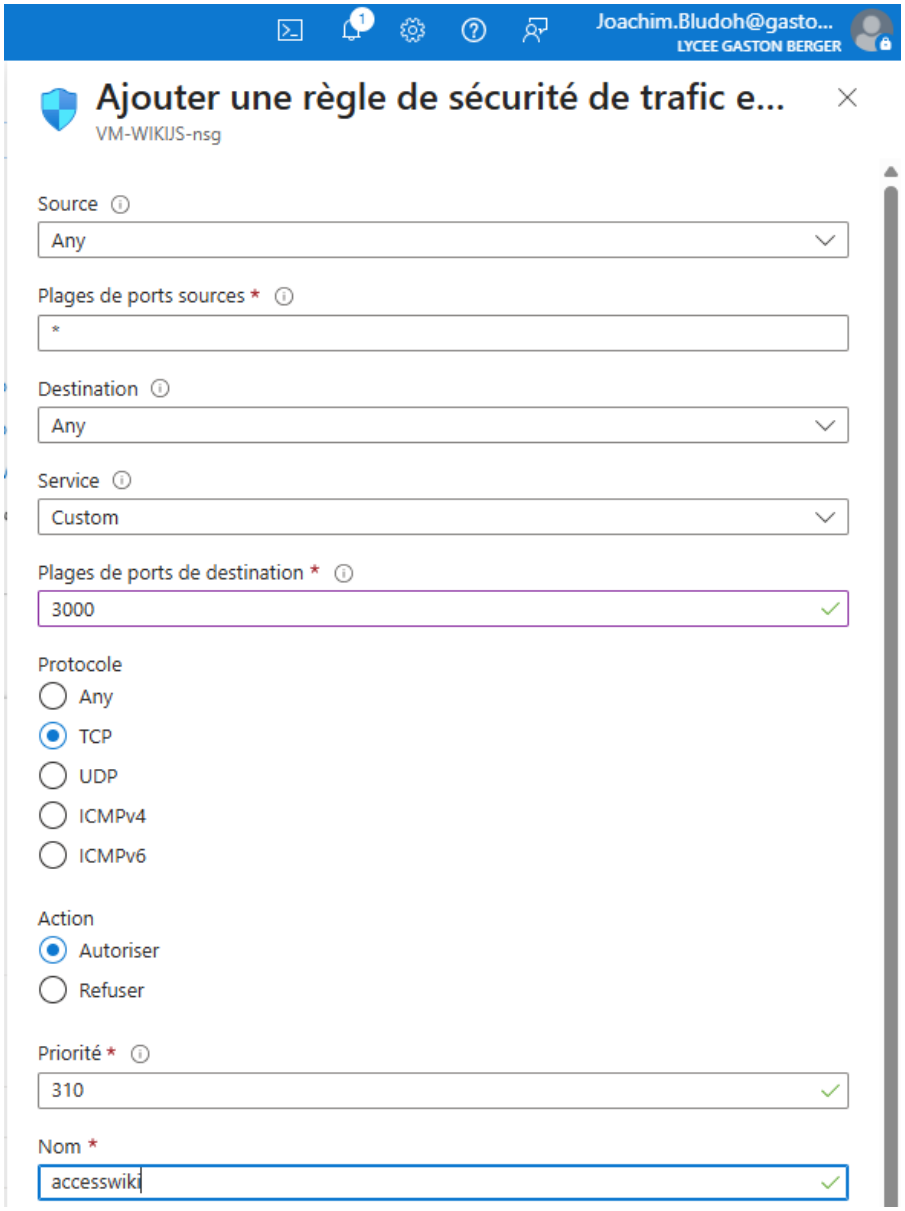
```
[bludoh-joachim@VM-WIKIJS ~]$ sudo systemctl enable --now redis
Created symlink /etc/systemd/system/multi-user.target.wants/redis.service → /usr/lib/systemd/system/redis.service.
```

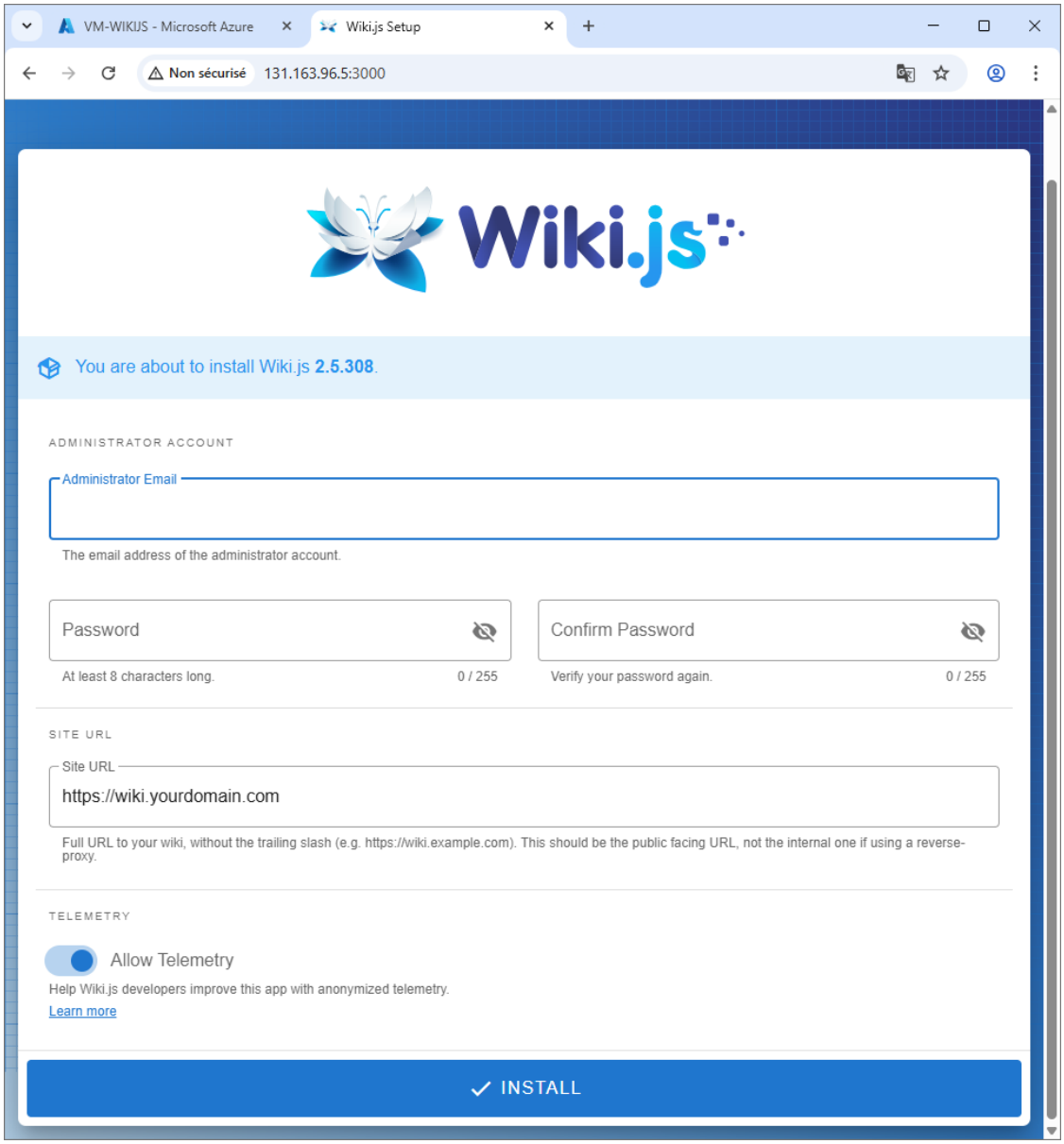
```
[bludoh-joachim@VM-WIKIJS ~]$ systemctl status redis
● redis.service - Redis persistent key-value database
     Loaded: loaded (/usr/lib/systemd/system/redis.service; enabled; preset: disabled)
    Drop-In: /etc/systemd/system/redis.service.d
             └─limit.conf
     Active: active (running) since Fri 2025-11-07 13:48:56 UTC; 1min 6s ago
   Main PID: 20422 (redis-server)
     Status: "Ready to accept connections"
      Tasks: 5 (limit: 3972)
     Memory: 4.8M
        CPU: 119ms
     CGroup: /system.slice/redis.service
             └─20422 "/usr/bin/redis-server 127.0.0.1:6379"

Nov 07 13:48:56 VM-WIKIJS systemd[1]: Starting Redis persistent key-value database...
Nov 07 13:48:56 VM-WIKIJS systemd[1]: Started Redis persistent key-value database.
```

```
[bludoh-joachim@VM-WIKIJS /]$ cd /srv/wiki
[bludoh-joachim@VM-WIKIJS wiki]$
```

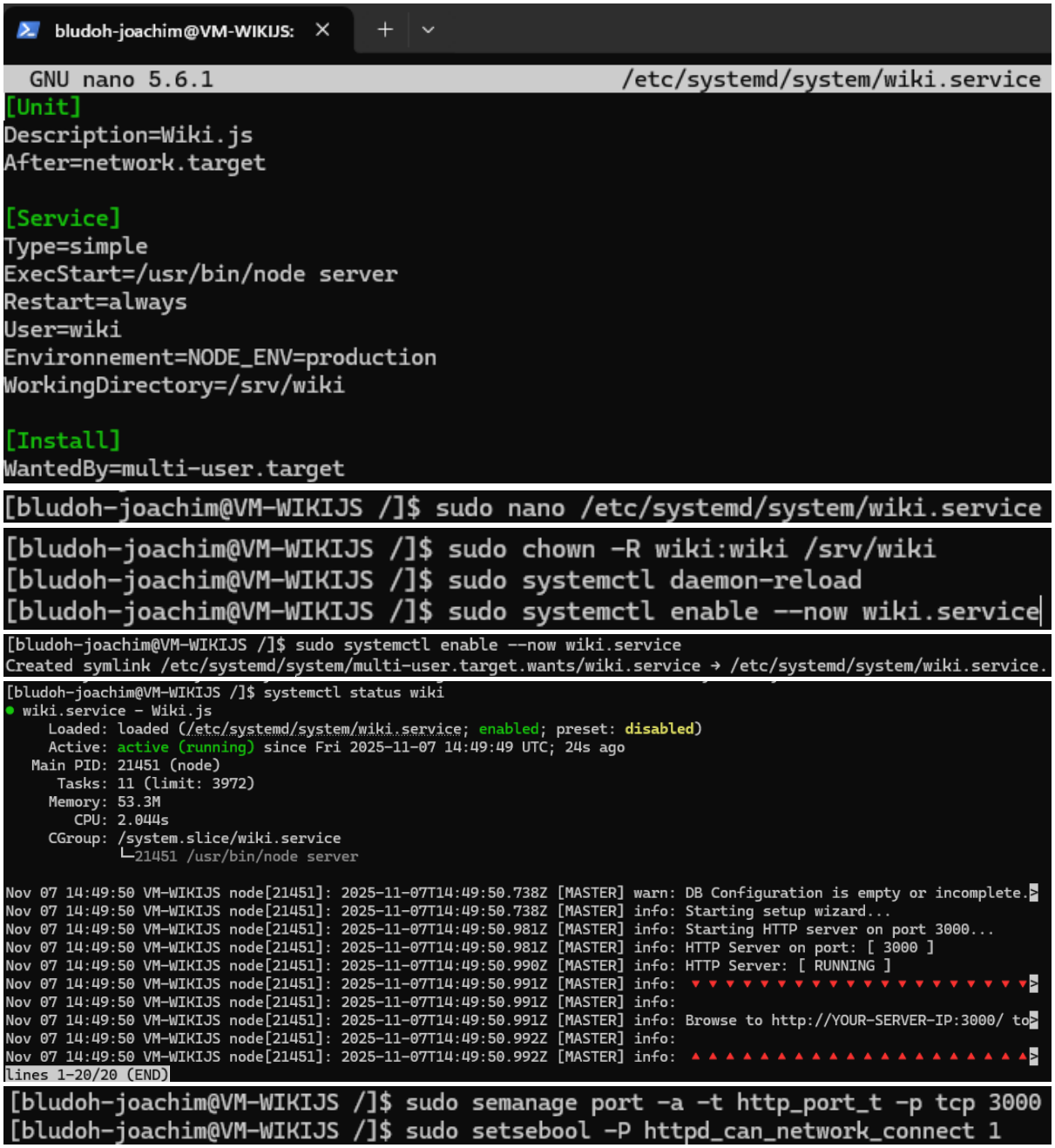
```
[bludoh-joachim@VM-WIKIJS wiki]$ sudo cp config.sample.yml config.yml
[bludoh-joachim@VM-WIKIJS wiki]$
```

```
# ----------------------------------------------------------------------
# Database
# ----------------------------------------------------------------------
# Supported Database Engines:
# - postgres = PostgreSQL 9.5 or later
# - mysql = MySQL 8.0 or later (5.7.8 partially supported, refer to docs)
# - mariadb = MariaDB 10.2.7 or later
# - mssql = MS SQL Server 2012 or later
# - sqlite = SQLite 3.9 or later

db:
  type: mariadb

  # PostgreSQL / MySQL / MariaDB / MS SQL Server only:
  host: localhost
  port: 3306
  user: wiki
  pass: Def@ultP@ssword
  db: dbwiki
  ssl: false
```


Joachim.Bludoh@gasto...
LYCEE GASTON BERGER
Ajouter une règle de sécurité de trafic e...
VM-WIKIJS-nsg
Source
Any
Plages de ports sources *
*
Destination
Any
Service
Custom
Plages de ports de destination *
3000
Protocole
Any
TCP
UDP
ICMPv4
ICMPv6
Action
Autoriser
Refuser
Priorité *
310
Nom *
accesswiki




```
^C[bludoh-joachim@VM-WIKIJS wiki]$ sudo node server
Loading configuration from /srv/wiki/config.yml... OK
2025-11-07T14:07:47.509Z [MASTER] info: ======================================
2025-11-07T14:07:47.512Z [MASTER] info: = Wiki.js 2.5.308 ====================
2025-11-07T14:07:47.512Z [MASTER] info: ======================================
2025-11-07T14:07:47.512Z [MASTER] info: Initializing...
2025-11-07T14:07:48.518Z [MASTER] info: Using database driver mysql2 for mariadb [ OK ]
2025-11-07T14:07:48.526Z [MASTER] info: Connecting to database...
2025-11-07T14:07:48.572Z [MASTER] info: Database Connection Successful [ OK ]
2025-11-07T14:07:48.643Z [MASTER] warn: DB Configuration is empty or incomplete. Switching to Setup mode...
2025-11-07T14:07:48.644Z [MASTER] info: Starting setup wizard...
2025-11-07T14:07:48.899Z [MASTER] info: Starting HTTP server on port 3000...
2025-11-07T14:07:48.900Z [MASTER] info: HTTP Server on port: [ 3000 ]
2025-11-07T14:07:48.909Z [MASTER] info: HTTP Server: [ RUNNING ]
2025-11-07T14:07:48.910Z [MASTER] info:  ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼
2025-11-07T14:07:48.910Z [MASTER] info:
2025-11-07T14:07:48.910Z [MASTER] info: Browse to http://YOUR-SERVER-IP:3000/ to complete setup!
2025-11-07T14:07:48.911Z [MASTER] info:
2025-11-07T14:07:48.911Z [MASTER] info:  ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲
```


bludoh-joachim@VM-WIKIJS:
GNU nano 5.6.1 /etc/systemd/system/wiki.service
[Unit]
Description=Wiki.js
After=network.target
[Service]
Type=simple
ExecStart=/usr/bin/node server
Restart=always
User=wiki
Environnement=NODE_ENV=production
WorkingDirectory=/srv/wiki
[Install]
WantedBy=multi-user.target
[bludoh-joachim@VM-WIKIJS /]$ sudo nano /etc/systemd/system/wiki.service
[bludoh-joachim@VM-WIKIJS /]$ sudo chown -R wiki:wiki /srv/wiki
[bludoh-joachim@VM-WIKIJS /]$ sudo systemctl daemon-reload
[bludoh-joachim@VM-WIKIJS /]$ sudo systemctl enable --now wiki.service
[bludoh-joachim@VM-WIKIJS /]$ sudo systemctl enable --now wiki.service
Created symlink /etc/systemd/system/multi-user.target.wants/wiki.service → /etc/systemd/system/wiki.service.
[bludoh-joachim@VM-WIKIJS /]$ systemctl status wiki
● wiki.service - Wiki.js
Loaded: loaded (/etc/systemd/system/wiki.service; enabled; preset: disabled)
Active: active (running) since Fri 2025-11-07 14:49:49 UTC; 24s ago
Main PID: 21451 (node)
Tasks: 11 (limit: 3972)
Memory: 53.3M
CPU: 2.044s
CGroup: /system.slice/wiki.service
└21451 /usr/bin/node server
Nov 07 14:49:50 VM-WIKIJS node[21451]: 2025-11-07T14:49:50.738Z [MASTER] warn: DB Configuration is empty or incomplete.
Nov 07 14:49:50 VM-WIKIJS node[21451]: 2025-11-07T14:49:50.738Z [MASTER] info: Starting setup wizard...
Nov 07 14:49:50 VM-WIKIJS node[21451]: 2025-11-07T14:49:50.981Z [MASTER] info: Starting HTTP server on port 3000...
Nov 07 14:49:50 VM-WIKIJS node[21451]: 2025-11-07T14:49:50.981Z [MASTER] info: HTTP Server on port: [3000]
Nov 07 14:49:50 VM-WIKIJS node[21451]: 2025-11-07T14:49:50.990Z [MASTER] info: HTTP Server: [RUNNING]
Nov 07 14:49:50 VM-WIKIJS node[21451]: 2025-11-07T14:49:50.991Z [MASTER] info:
Nov 07 14:49:50 VM-WIKIJS node[21451]: 2025-11-07T14:49:50.991Z [MASTER] info:
Nov 07 14:49:50 VM-WIKIJS node[21451]: 2025-11-07T14:49:50.991Z [MASTER] info: Browse to http://YOUR-SERVER-IP:3000/ to
Nov 07 14:49:50 VM-WIKIJS node[21451]: 2025-11-07T14:49:50.992Z [MASTER] info:
Nov 07 14:49:50 VM-WIKIJS node[21451]: 2025-11-07T14:49:50.992Z [MASTER] info:
lines 1-20/20 (END)
[bludoh-joachim@VM-WIKIJS /]$ sudo semanage port -a -t http_port_t -p tcp 3000
[bludoh-joachim@VM-WIKIJS /]$ sudo setsebool -P httpd_can_network_connect 1

Mise en place stratégie d'authentification

Création de la VM AD

Bases Vue JSON

Groupe de ressources (déplacer)
VM-AD

Statut
En cours d'exécution

Emplacement
Norway East (Zone 1)

Abonnement (déplacer)
Azure for Students

ID d'abonnement
7d5ce8a7-786a-4587-b3e3-8cf9cfe67fe6

Zone de disponibilité
1

Système d'exploitation
Windows (Windows Server 2025 Datacent...

Taille
Standard B2s (2 processeurs virtuels, 4 Gio...

Adresse IP publique de la carte réseau principale
131.163.88.94

1 adresses IP publiques associées

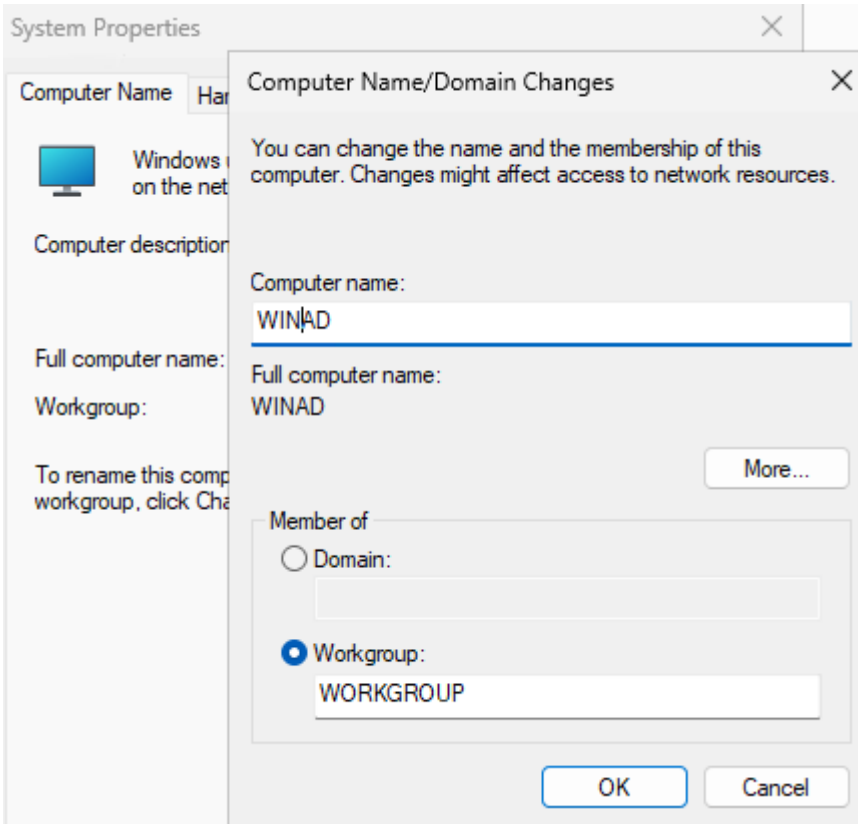
Réseau/sous-réseau virtuel
vnet-norwayeast-1/snet-norwayeast-1

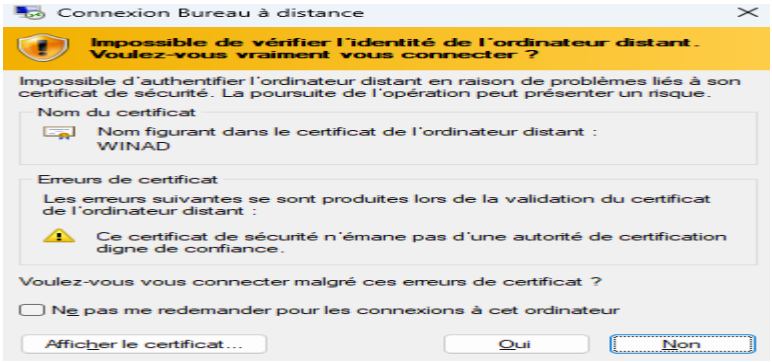
Nom DNS
Non configurée

État d'intégrité
-

Heure de création
07/11/2025 15:16 UTC

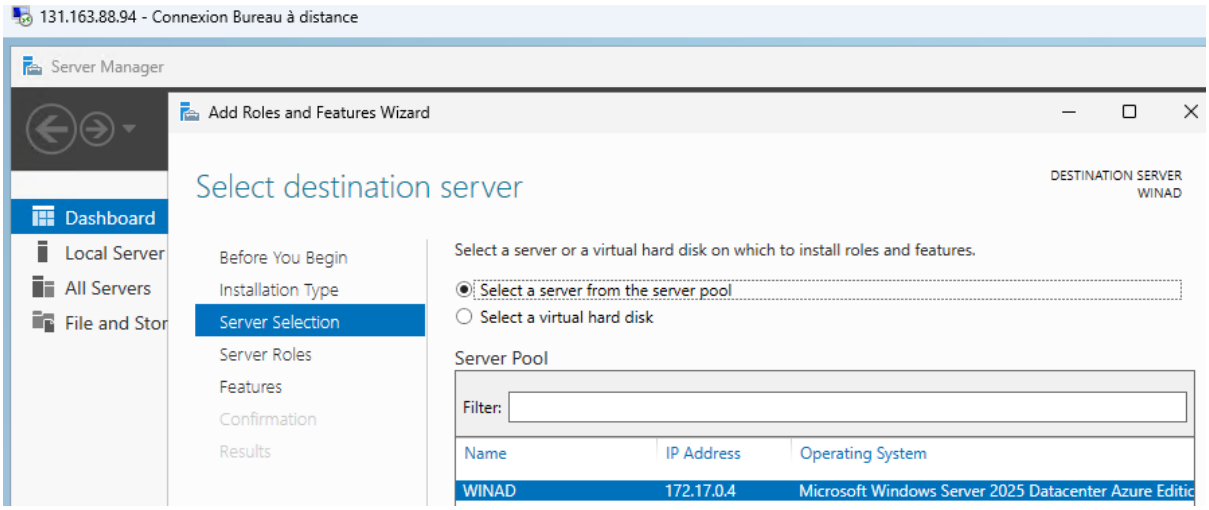
On lance une session de contrôle à distance, on renomme le PC en WINAD puis on redémarre.



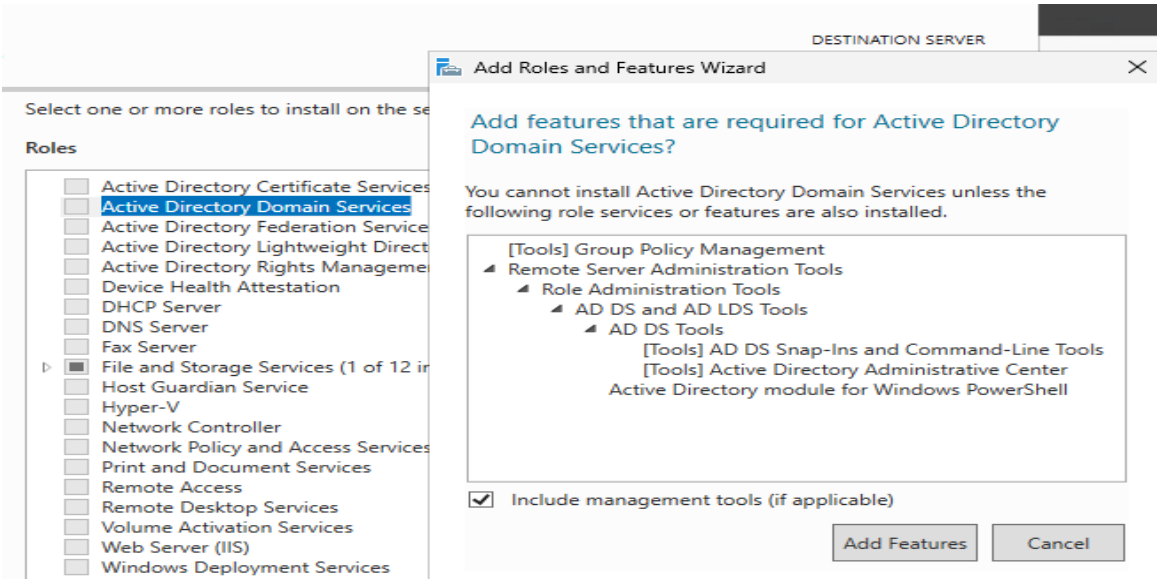


On clique sur “Add Roles and Features” et on sélectionne pour les étapes suivantes :

- Installation Type : Role-based or feature-based installation
- Server Selection : Select a server from the server pool. Choisir WINAD



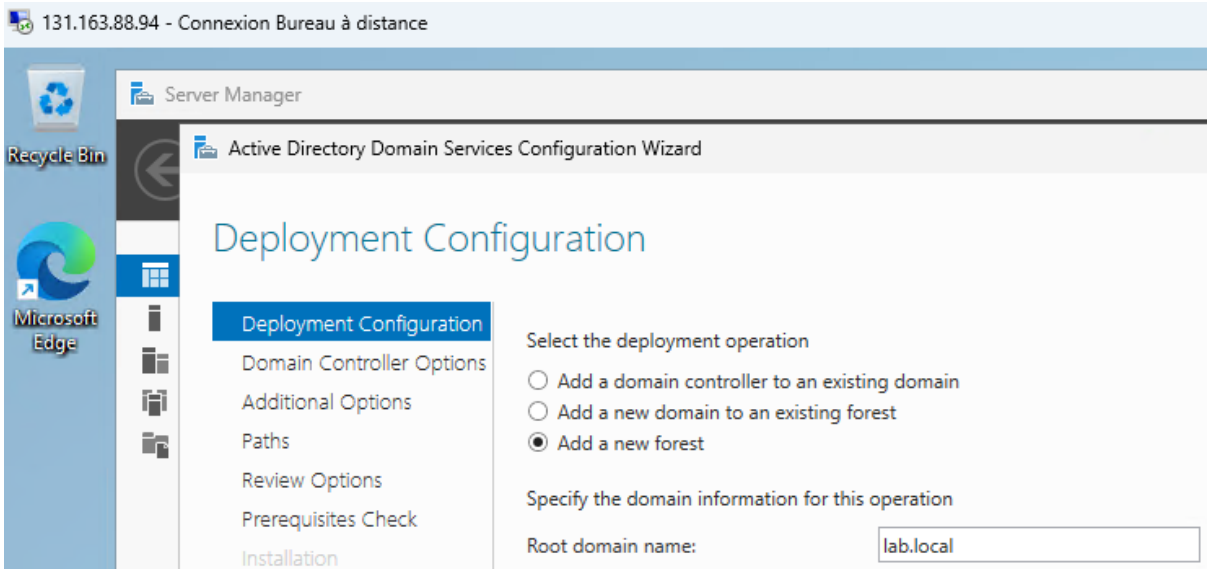
- Server Roles : Active Directory Domain Services



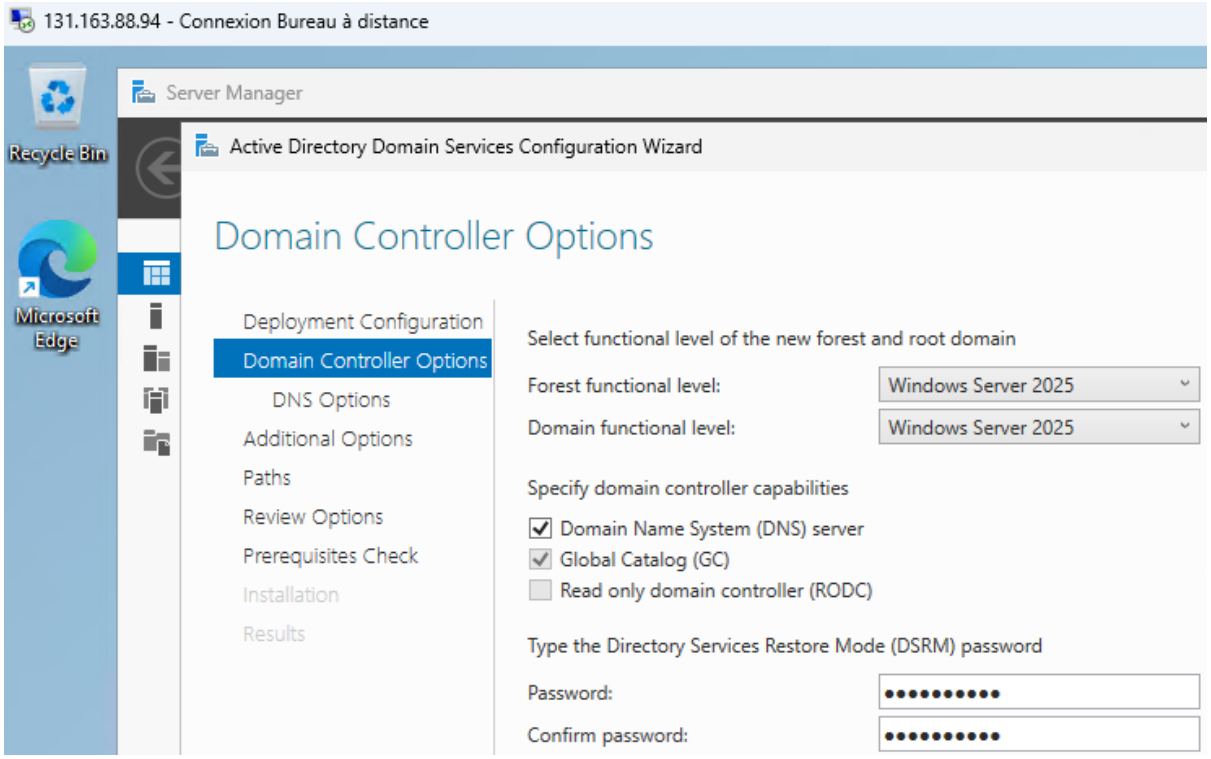
Puis on lance l’installation.

Ensuite dans “Active Directory Domain Services Configuration”:

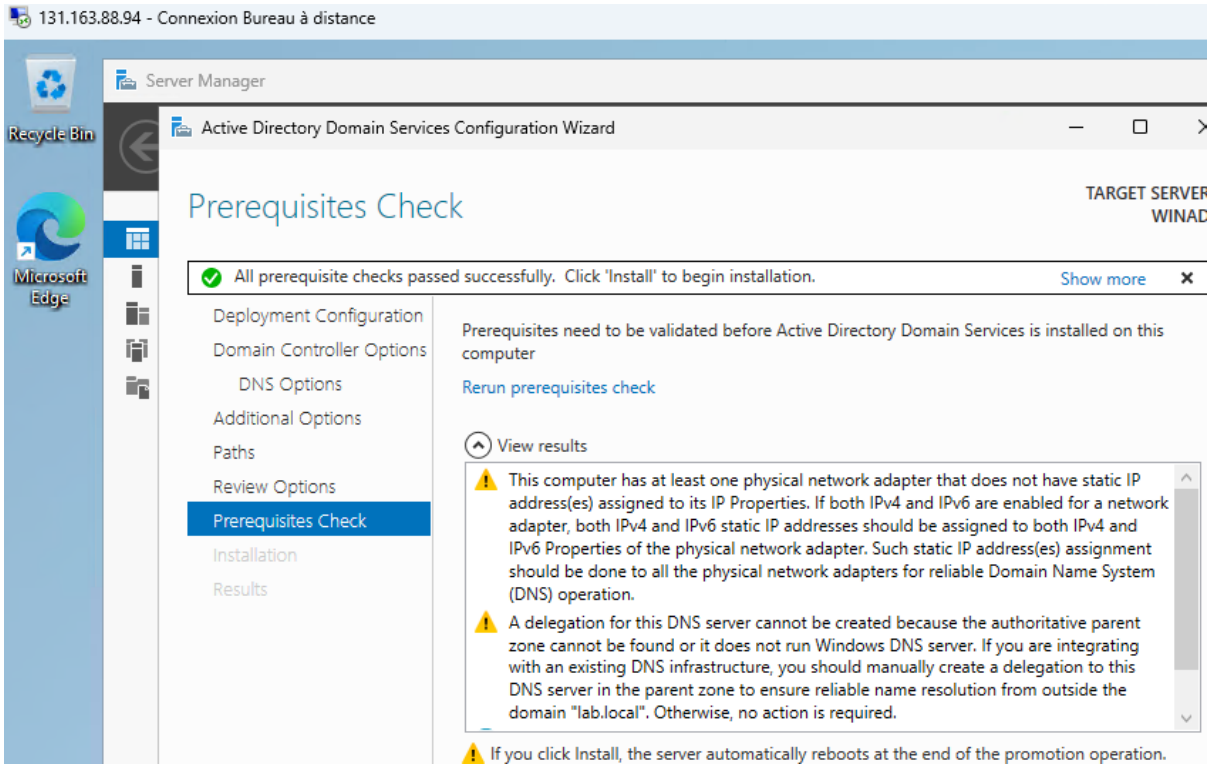
- Deployment Configuration : Add a new forest, Root domain name : lab.local



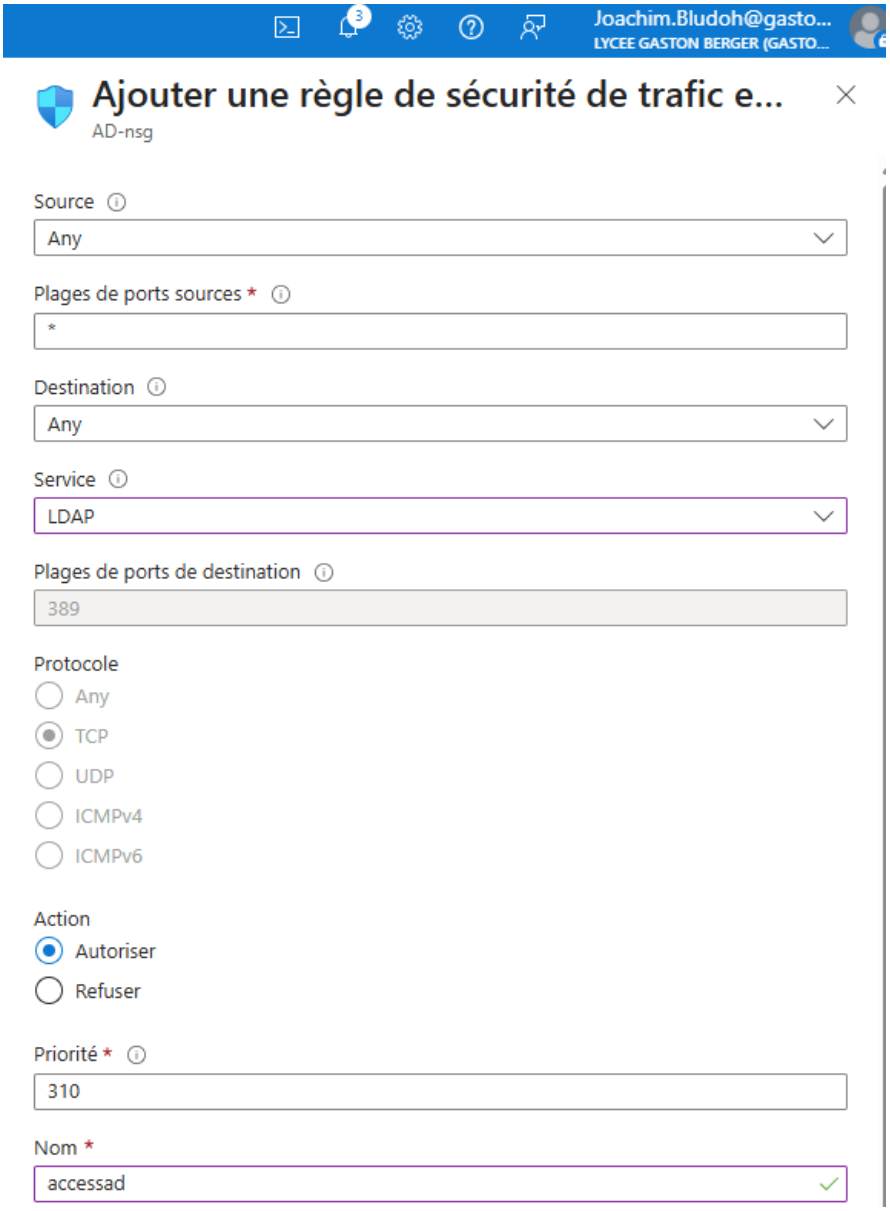
- Domain Controller Options : ajout de mot de passe DSRM



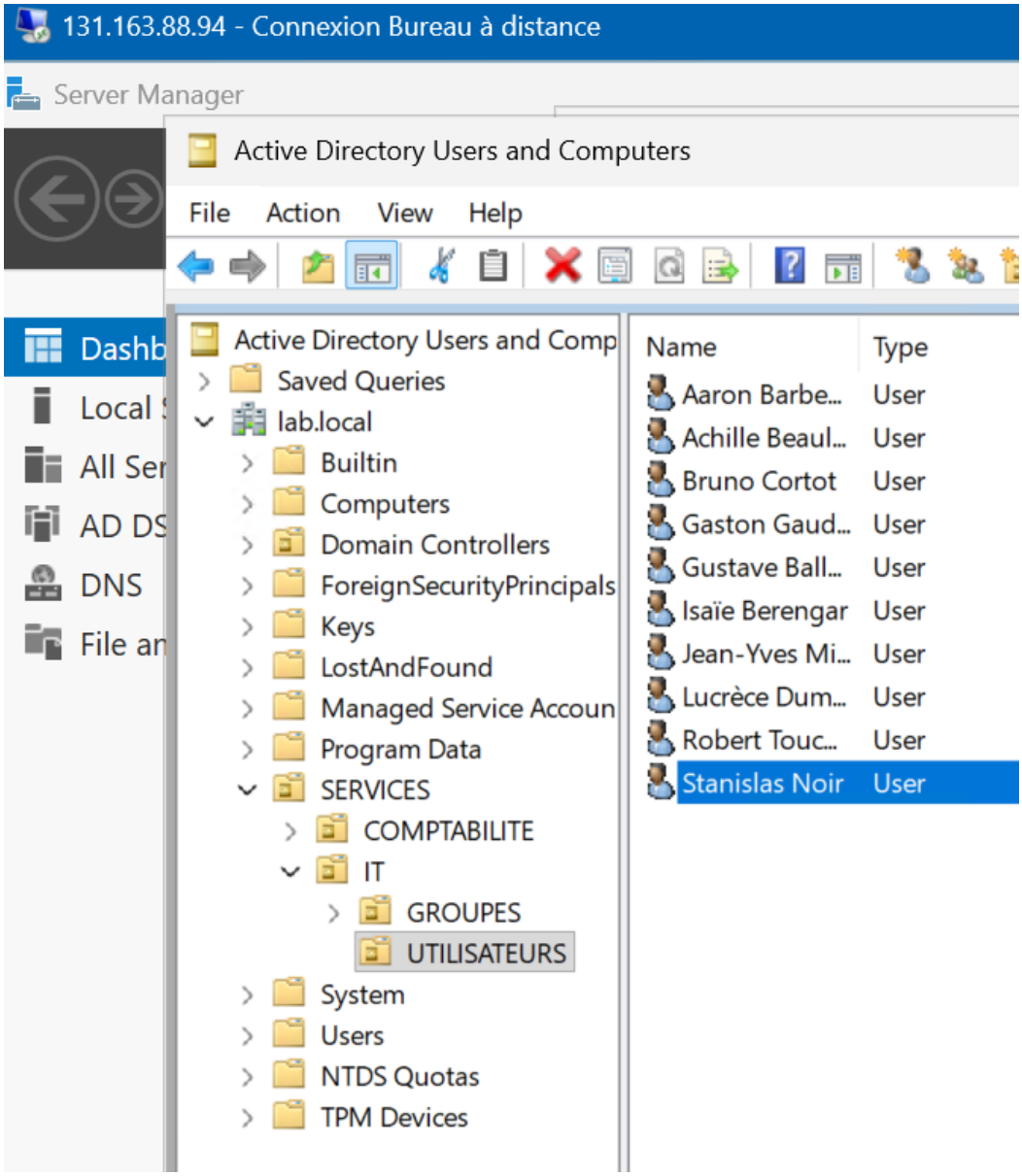
Le reste des options n'a pas besoin d'être changé, on clique sur suivant pour le reste et on lance l'installation.



On ajoute un accès au port 389 pour que WIKIJS puisse chercher les éléments nécessaires :

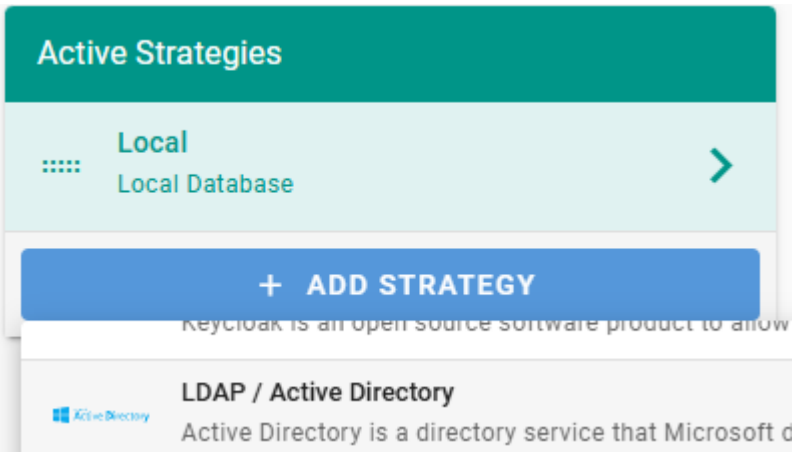


L'AD est créé, on s'occupe maintenant de l'arborescence :

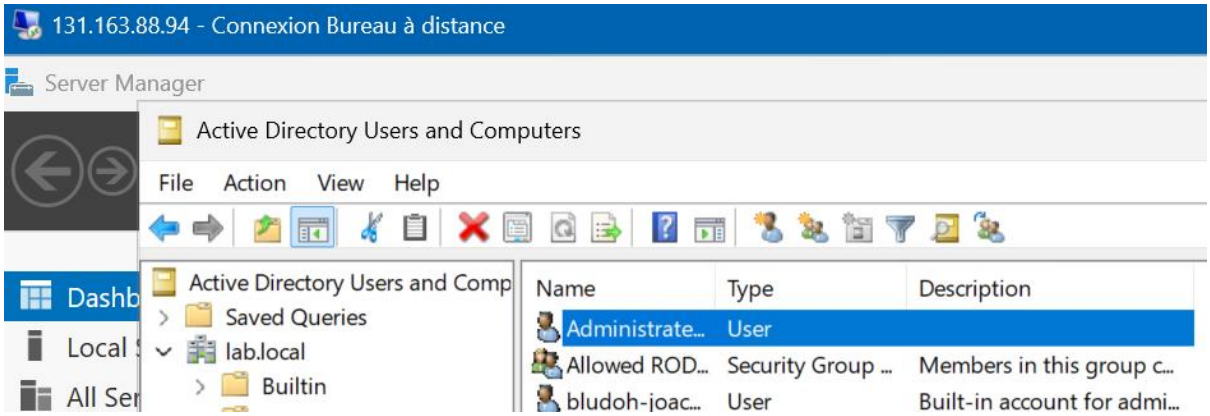


Authentification WIKIJS avec Active Directory

Dans Authentification, on ajoute la Stratégie “LDAP / Active Directory”



(J’ai créé un compte administrateur pour le paramétrage avec les mêmes droits que le compte que j’utilise pour me connecter)



STRATEGY CONFIGURATION

LDAP URL

ldap://131.163.88.94:389

(e.g. ldap://serverhost:389 or ldaps://serverhost:636)

Admin Bind DN

CN=Administrateur,CN=Users,DC=lab,DC=local

The distinguished name (dn) of the account used for binding.

Admin Bind Credentials

G@ston2526

The password of the account used above for binding.

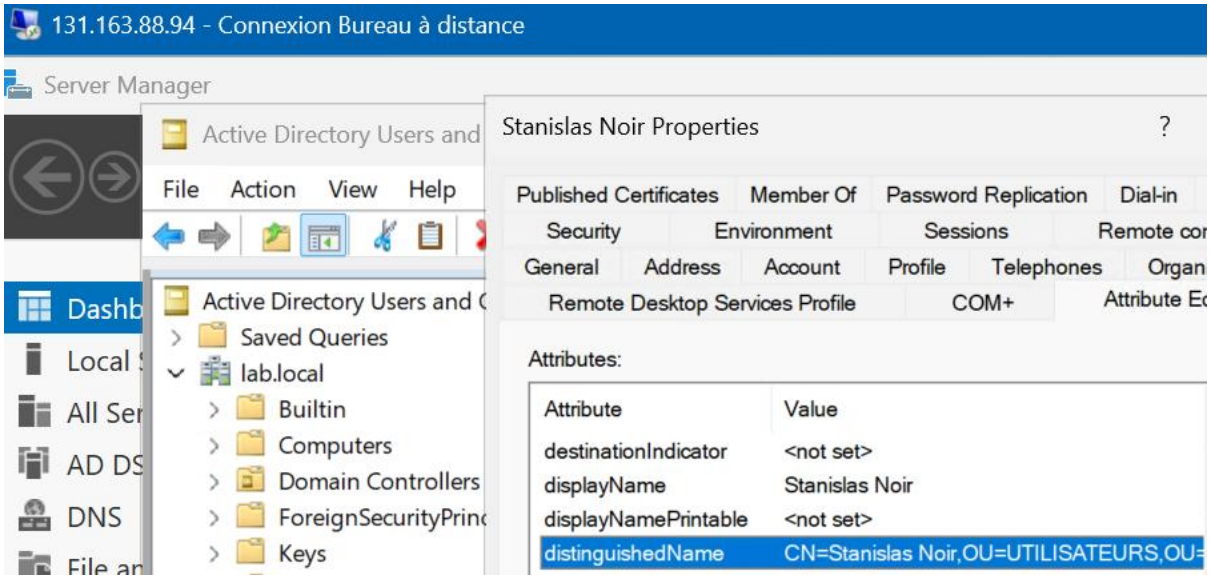
Search Base

OU=UTILISATEURS,OU=IT,OU=SERVICES,DC=lab,DC=local

The base DN from which to search for users.

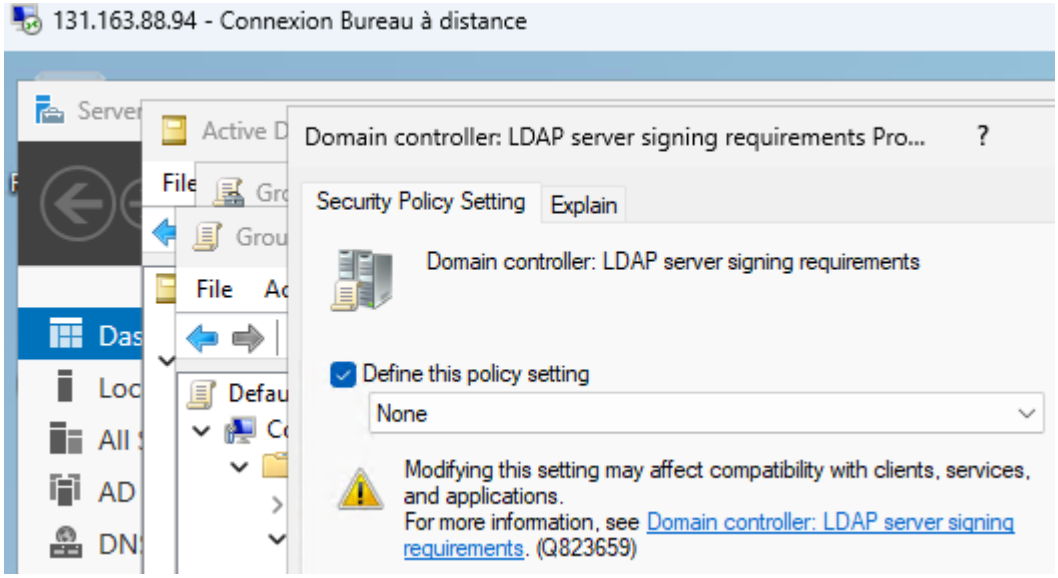
Search Filter

(sAMAccountName={{username}})

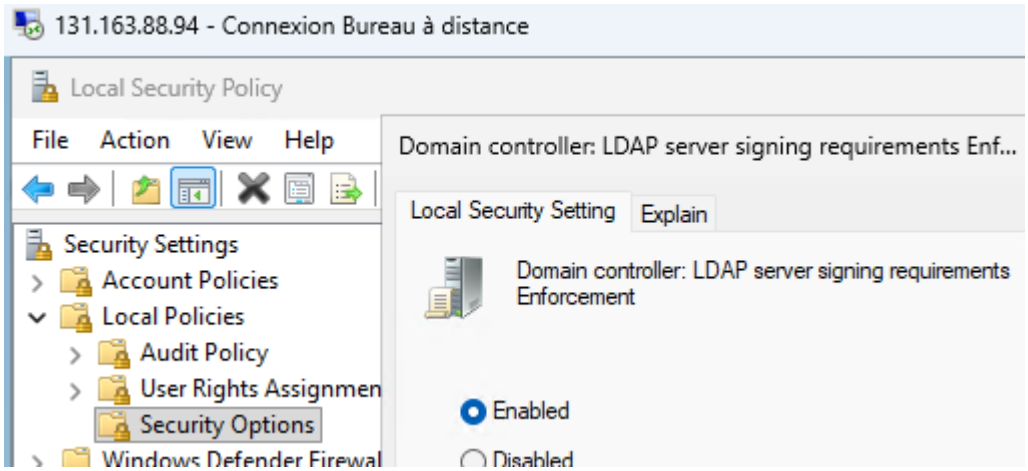


Dans “Group Policy Management” > Forest: lab.local > Domains > lab.local :

- Clic droit sur “Default Domain Policy” > Edit…
- On descend jusqu’a “Security Options”
- On définit “LDAP server signing requirements” a None.



Dans “Local Security Policy” : Security Settings > Local Policies > Security Options > LDAP server signing requirements Enforcement : on séléctionne Disabled (pas comme sur la capture d’écran).



On crée une nouvelle règle dans le pare-feu pour ouvrir le port 389.