

**\*Nom de l'établissement :**

CFA ROBERT SCHUMAN

***Réalisé par:***

AOURDOU BEN KHAYI BRAHIM

**Date :**

08/01/2025

**Encadrant :**

M.ROTH

**Intro :**

Dans le cadre de ma formation en BTS SIO, j'ai mis en place un serveur de sauvegarde en utilisant le logiciel Veeam Backup. La sauvegarde des données est une étape essentielle pour assurer la sécurité des informations et la continuité d'activité d'une entreprise. Veeam est une solution reconnue pour sa fiabilité, sa rapidité et sa simplicité d'utilisation. Grâce à ce projet, j'ai pu découvrir les étapes de configuration d'un système de sauvegarde et comprendre l'importance de protéger les données contre les pertes ou les défaillances système.

**DEBUT**

--->REQUIS:

-->Machine Windows Server

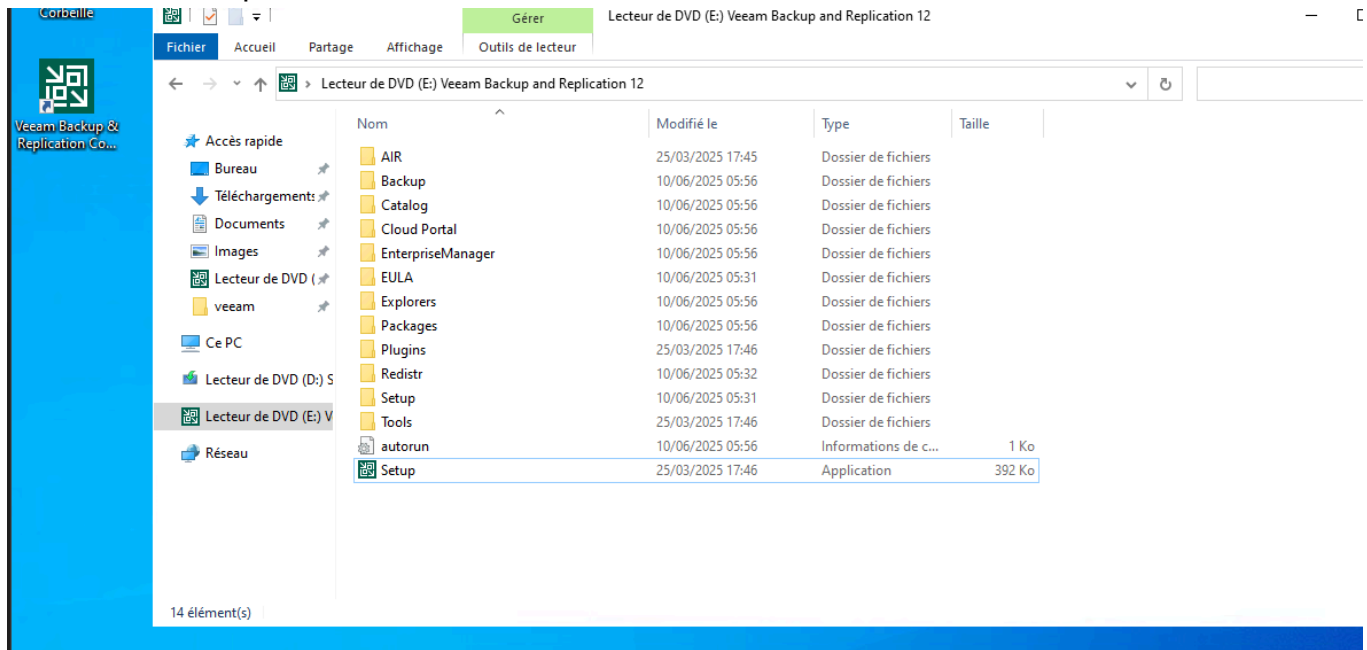
-->ISO VeeamBKP

-->Serveur de fichier Windows

-->Ouvrir le Windows Server

-->Click droit sur l'ISO et "monter"

-->Ouvrir le Setup



-->L'interface d'installation devrait s'ouvrir

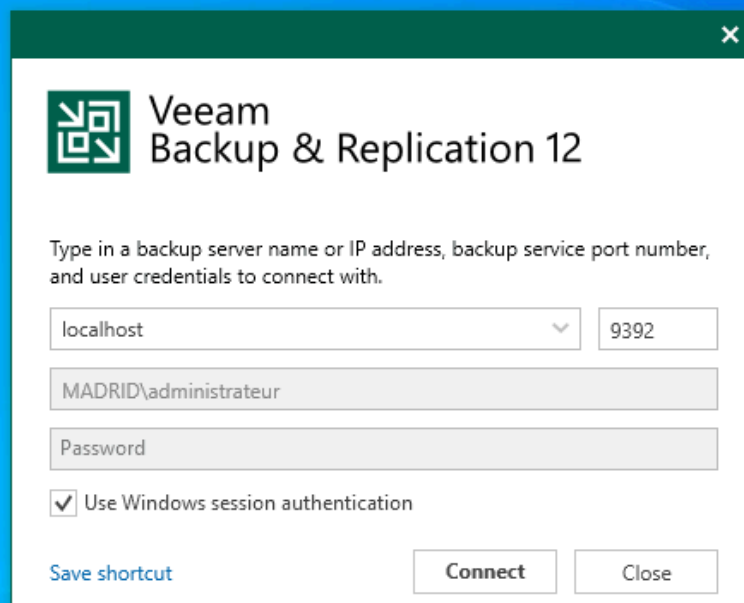
-->Choisir Veeam Backup & réplication

-->L'installation devrait durer environ 15min

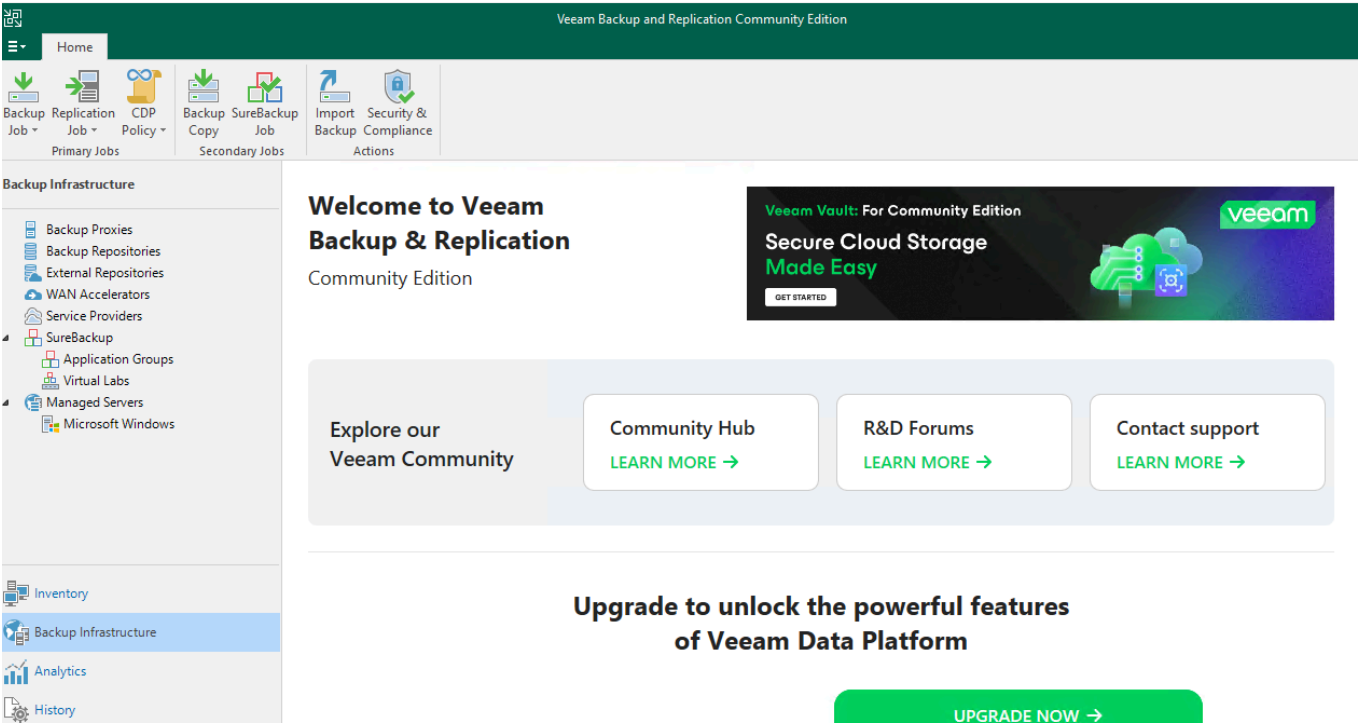
Après l'installation l'icone de Veeam Bkp devrait s'afficher sur le bureau

-->Ouvrir la console de gestion de VeeamBKP

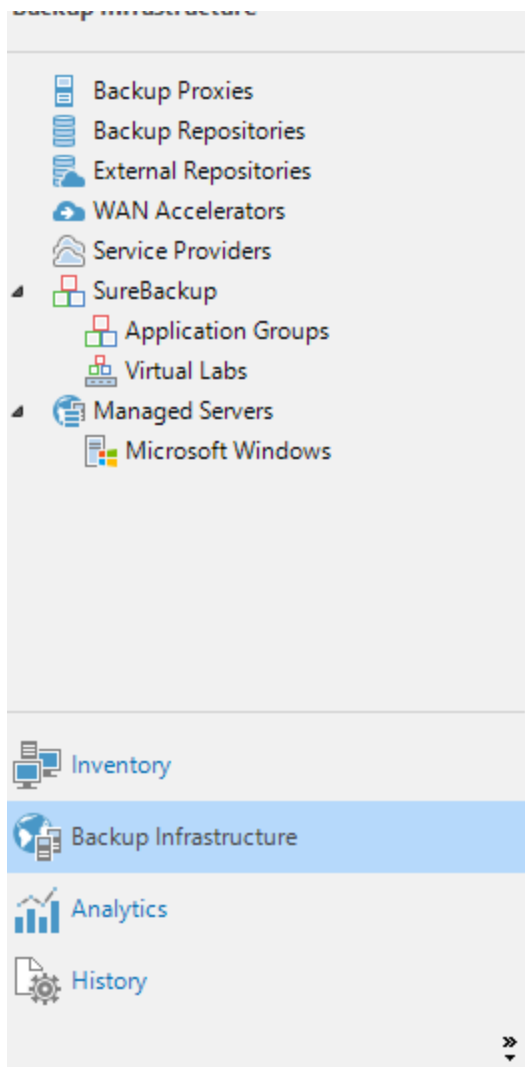
-->Par défaut la connexion se fait avec l'identifiant du serveur



-->La console s'affichera ainsi



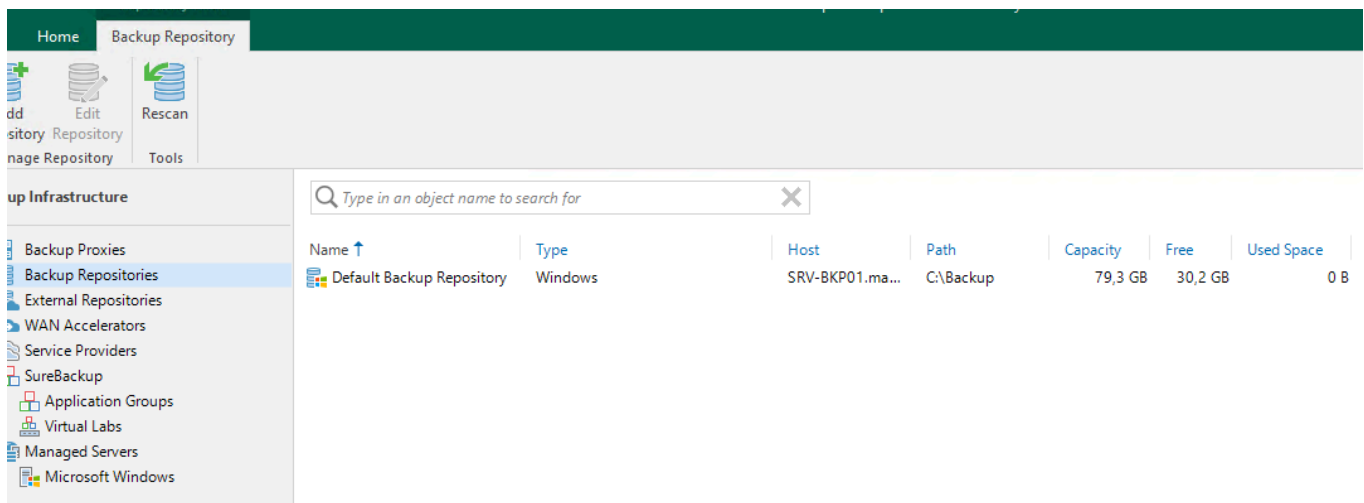
-->PREPARATION DU MENU DE SAUVEGARDE



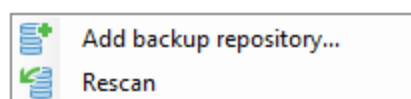
We  
Bac  
Com

Ex  
Vo

-->Création du dépôt de sauvegarde

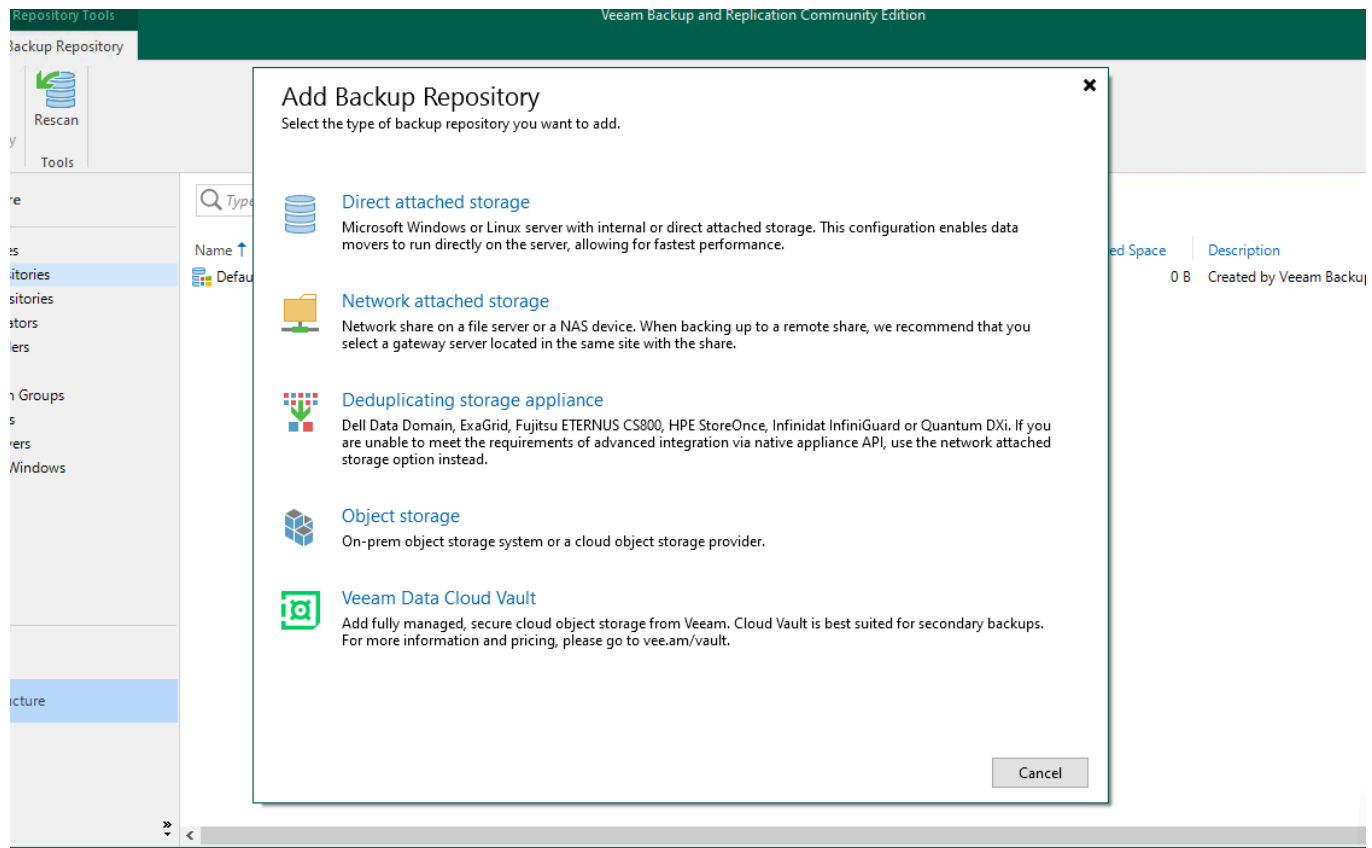


-->Click droit



--> Ici nous allons enregistrer les données de nos sauvegardes dans notre serveur de fichier.

--> Network attached storage



--> Choisir le protocole de connexion

--> Notre serveur de fichier est un Windows donc le protocole utilisé sera le SMB



## Network Attached Storage



Select the type of a shared folder you want to use as a backup repository.



### NFS share

Add an NFS share. This is the recommended configuration for leveraging storage capacity provided by NAS devices.



### SMB share

Add an SMB (CIFS) share. For reliability reasons, this configuration is recommended for continuously available (CA) network shares only.

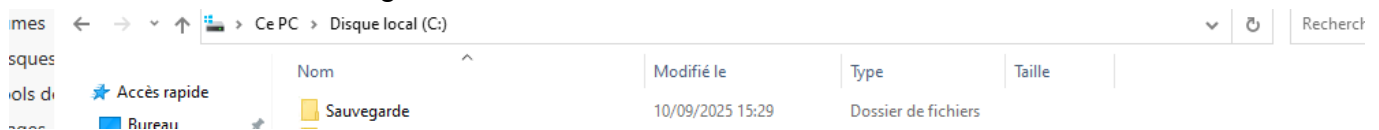
Cancel

--> Choisir le nom "Ici je vais le nommer comme mon serveur de fichier "

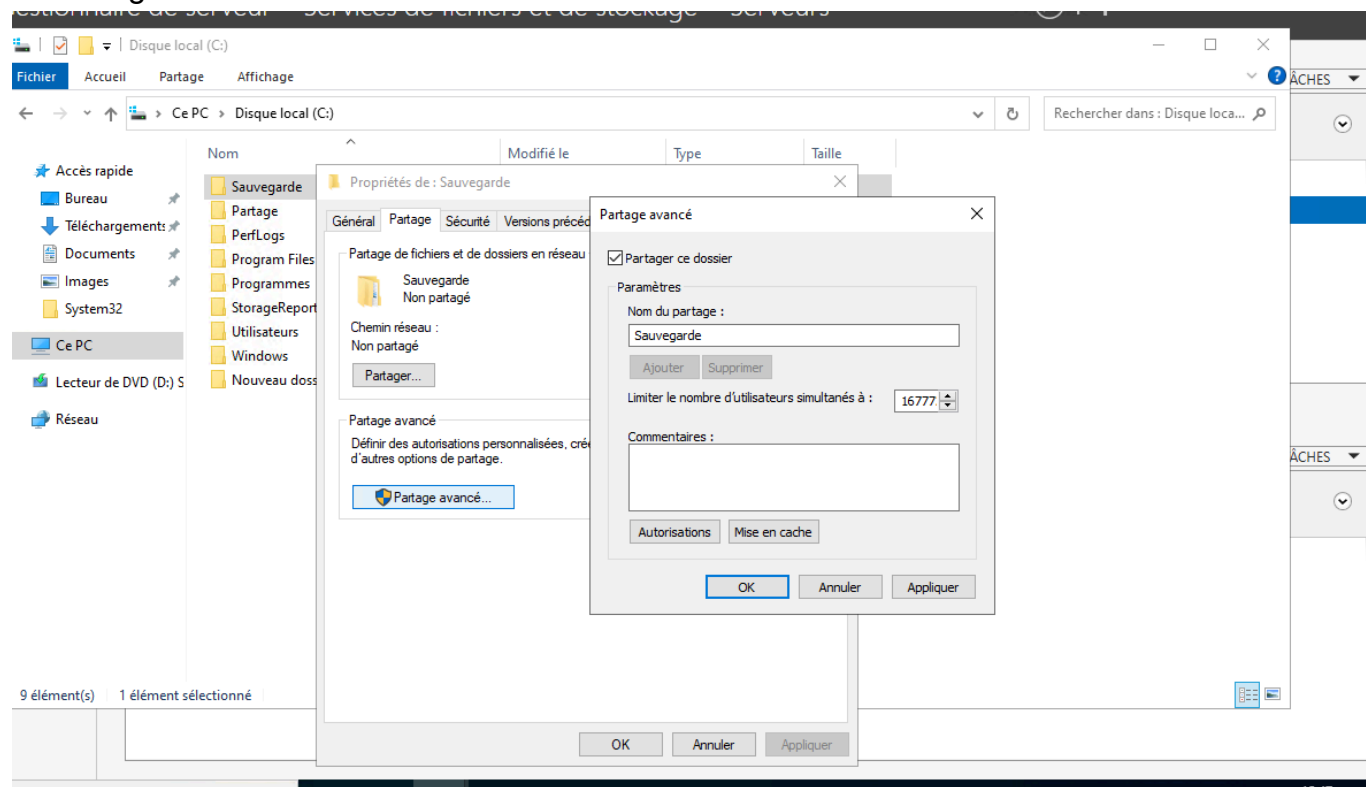
The screenshot shows the 'New Backup Repository' wizard. The 'Name' step is selected in the left sidebar. The main area has a 'Name' field containing 'SRV-V-MA-FICHIE' and a 'Description' field containing 'Created by MADRID\administrateur at 24/09/2025 15:40.' The 'Next >' button is highlighted. On the right, a 'Used Space' indicator shows '0 B'.

--> Ouvrir le serveur de fichier pour créer le dossier ou les données vont être envoyés

--> Créer un dossier sauvegarde

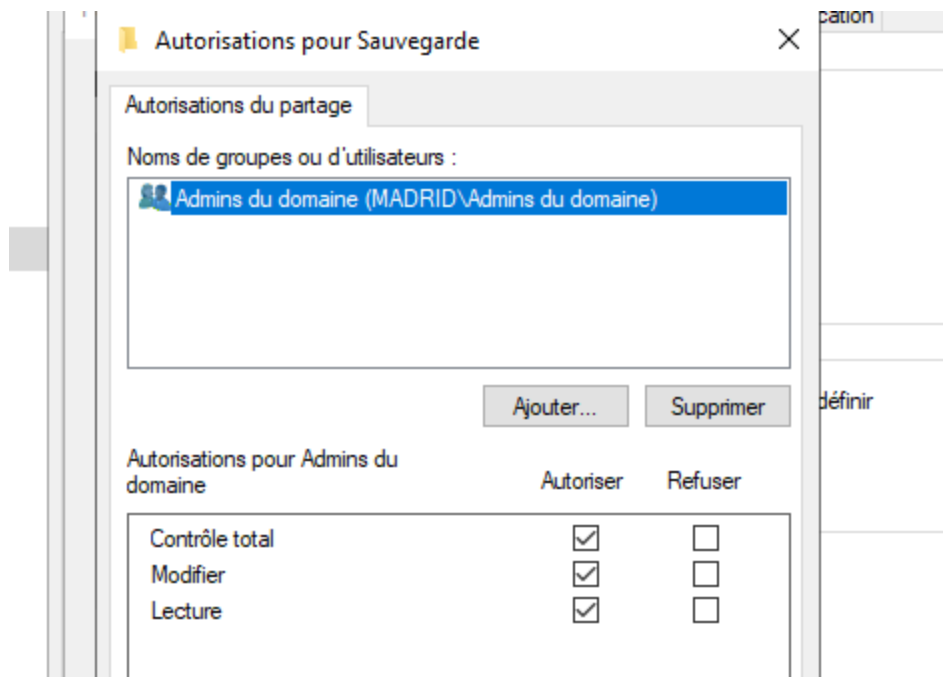
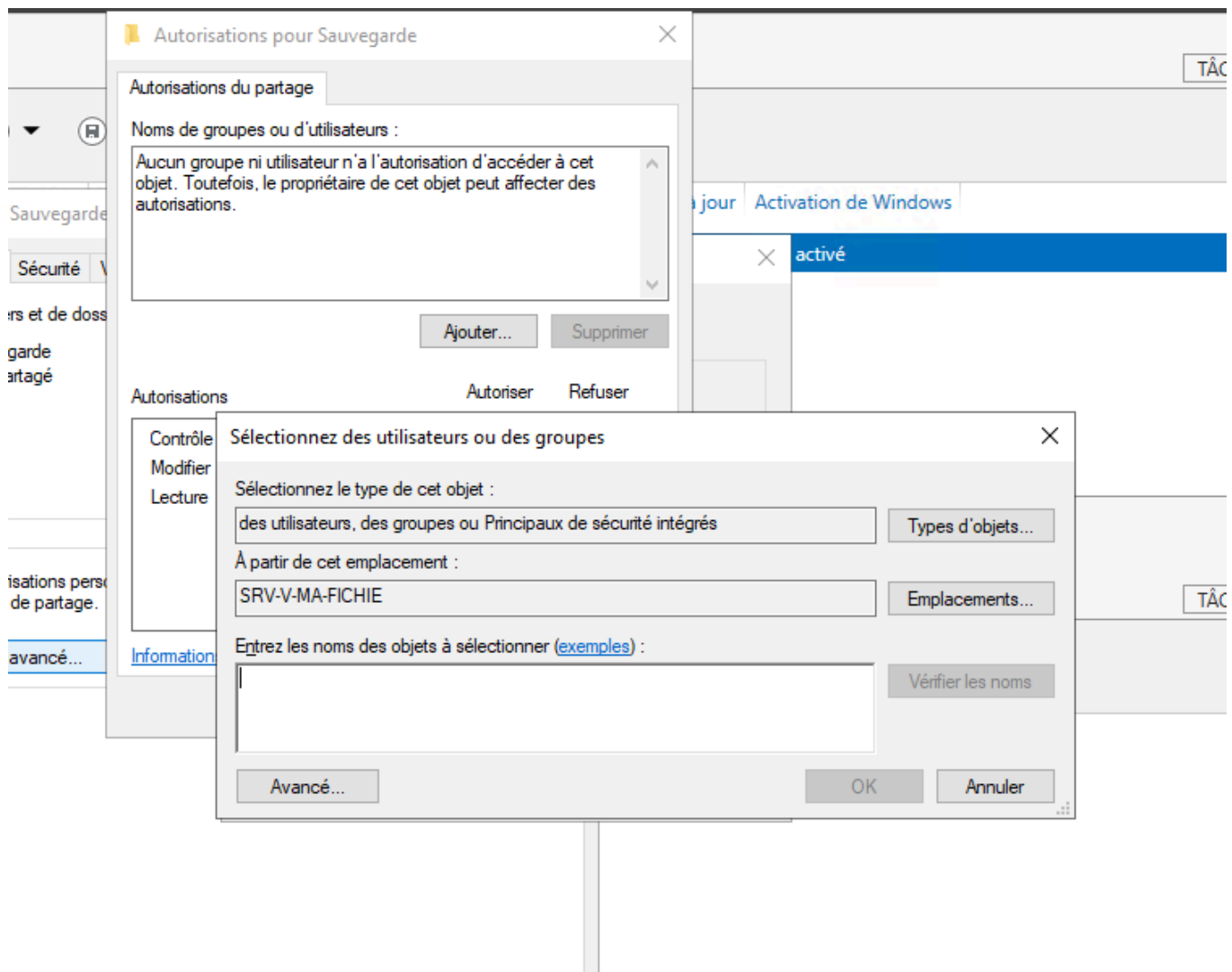


## -->Partager le dossier



## -->Ajouter les utilisateurs ayant accès au dossier de sauvegarde





-->Faire pareil dans l'onglet "sécurité  
 -->supprimer les accès aux utilisateurs

ffichage

isque le

rtage

rfLogs

ogram

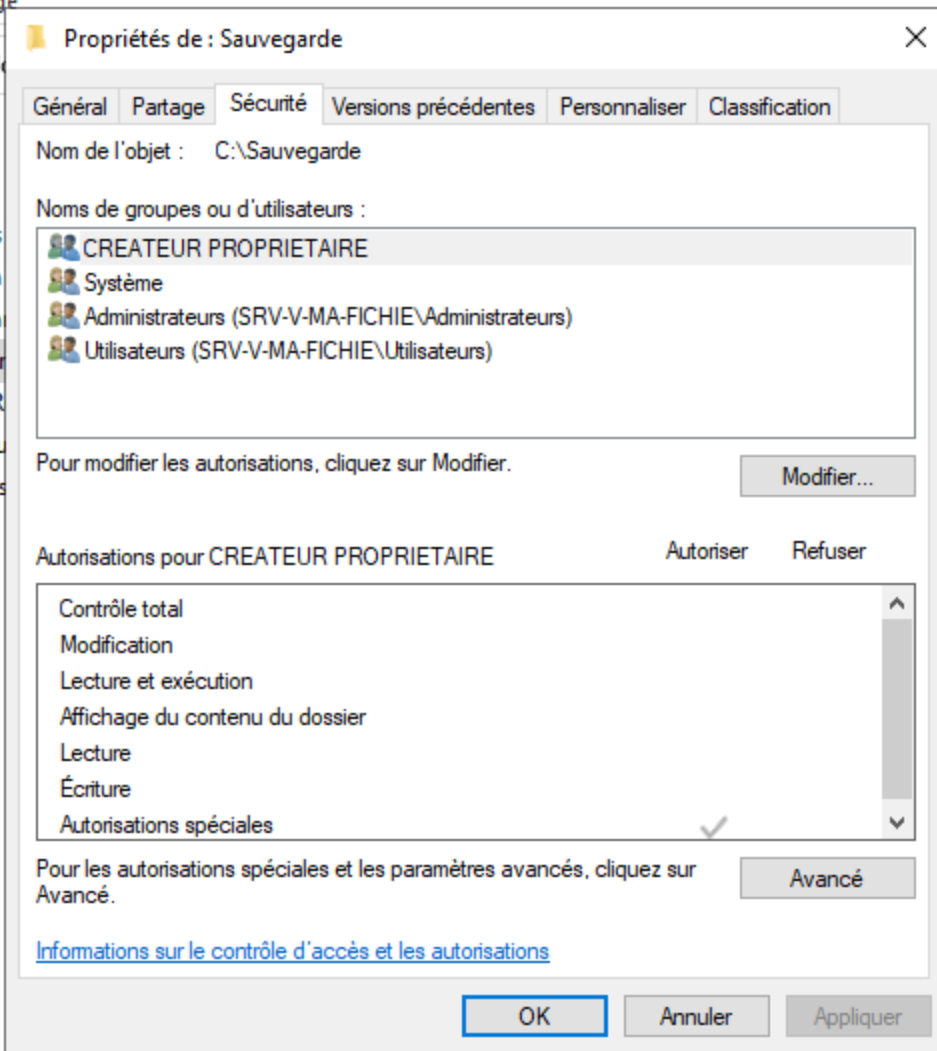
ogram

upegar

orageR

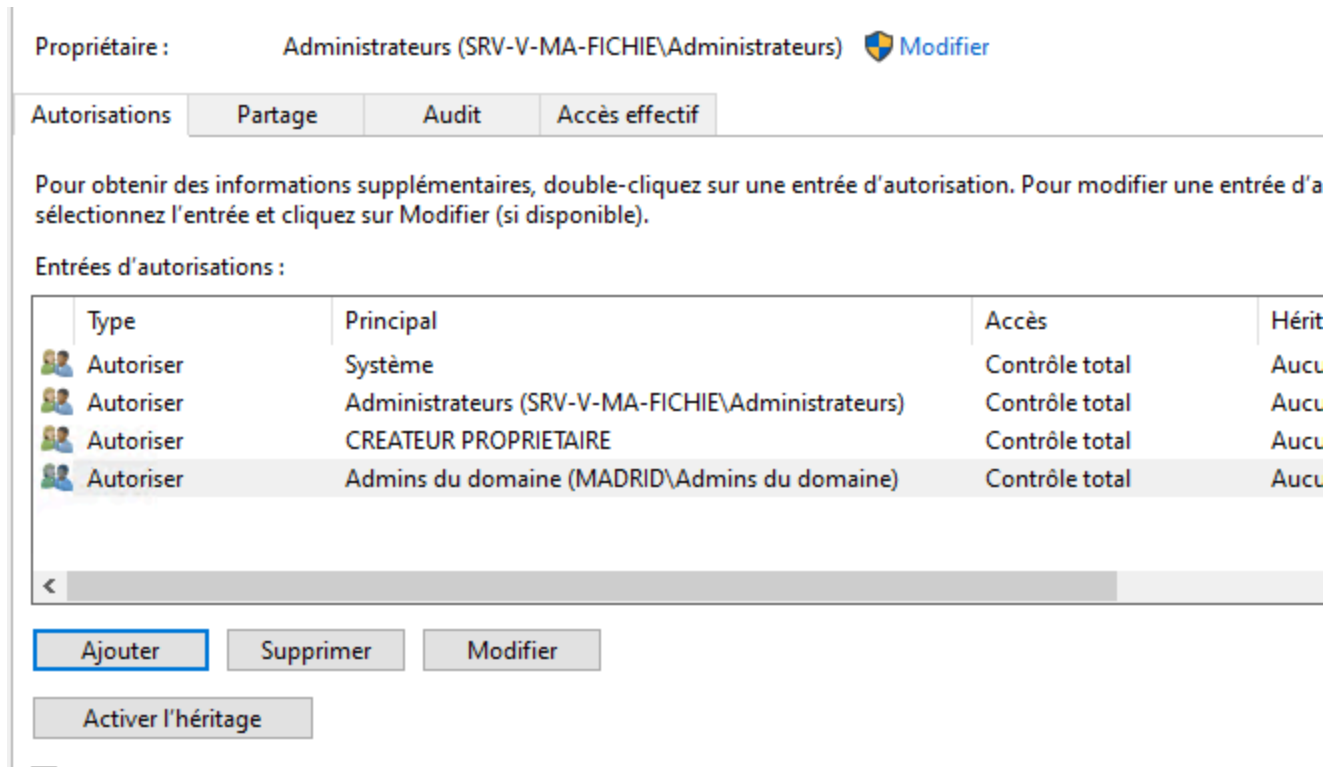
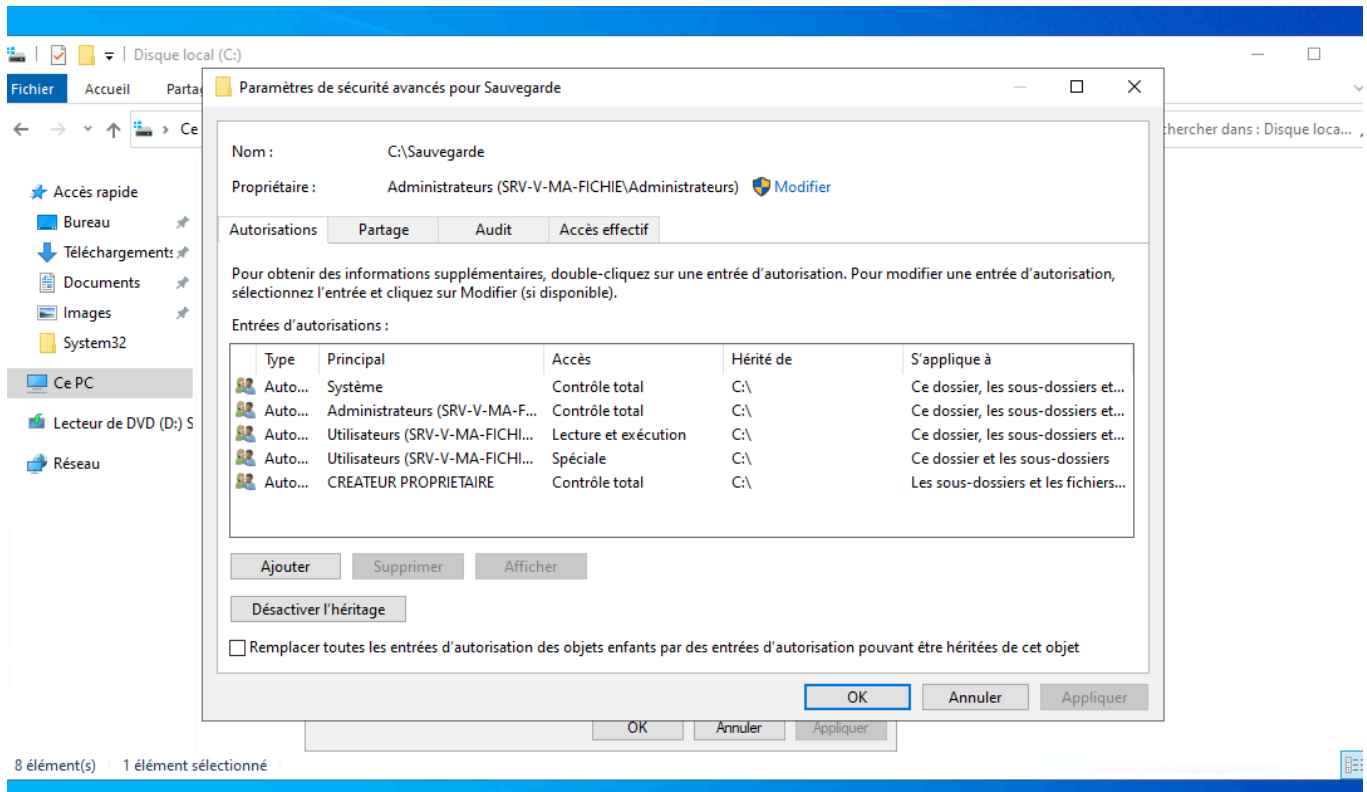
ilisateur

indows



é

--> Désactiver l'héritage pour pouvoir modifier les droits et supprimer les utilisateurs et ajouter les admin du domaine



-->RETOURNER SUR LE SERVEUR VEEAM

-->Spécifier le chemin du dossier de sauvegarde crée précédemment et s'authentifier avec un admin du domaine.

New Backup Repository

**Share**  
Type in UNC path to share (mapped drives are not supported), specify share access credentials and how backup jobs should write data to this share.

**Name**

**Share**

**Repository**

**Mount Server**

**Review**

**Apply**

**Summary**

Shared folder:  
\\SRV-V-MA-FICHIER\Sauvegarde  
Browse...

Use \\server\folder format

☒ This share requires access credentials:  
madrid\administrateur (madrid\administrateur, last edited: less than a day ago) Add...  
[Manage accounts](#)

Gateway server:  
Automatic selection  
Choose...

Select existing or add new credentials

Credentials

Username: madrid\administrateur Browse...

Password: .....

Description:  
madrid\administrateur

OK Cancel

-->L'accès a bien été validé

New Backup Repository

Repository

Type in path to the folder where backup files should be stored, and set repository load control options.

Name

Share

Repository

Mount Server

Review

Apply

Summary

Location

Path to folder:

\\SRV-V-MA-FICHIER\Sauvegarde

Capacity: 19,3 GB

Free space: 7,5 GB

Populate

Load control

Running too many concurrent tasks against the repository may reduce overall performance, and cause I/O timeouts. Control storage device saturation with the following settings:

☒ Limit maximum concurrent tasks to: 4

☐ Limit read and write data rate to: 1 MB/s

Click Advanced to customize repository settings.

Advanced...

< Previous


Next >

Finish

Cancel

-->Laisser l'emplacement par défaut pour la cache pendant la sauvegarde.

New Backup Repository



**Mount Server**  
Specify a server to mount backups to when performing advanced restores (file, application item and instant VM recoveries). Instant recoveries require a write cache folder to store changed disk blocks in.

Name

Share

Repository

**Mount Server**

Review

Apply

Summary

Mount server:  
SRV-BKP01.madrid.local (Backup server) Add New...

Instant recovery write cache folder:  
C:\ProgramData\Veeam\Backup\IRCache\ Browse...

Ensure that the selected volume has sufficient free disk space to store changed disk blocks of instantly recovered machines. We recommend placing the write cache folder on an SSD drive.

☒ Enable vPower NFS service on the mount server (recommended) Ports...

Unlocks instant recovery of any backup (physical, virtual or cloud) to a VMware vSphere VM.  
vPower NFS service is not used for instant recovery to a Microsoft Hyper-V VM.

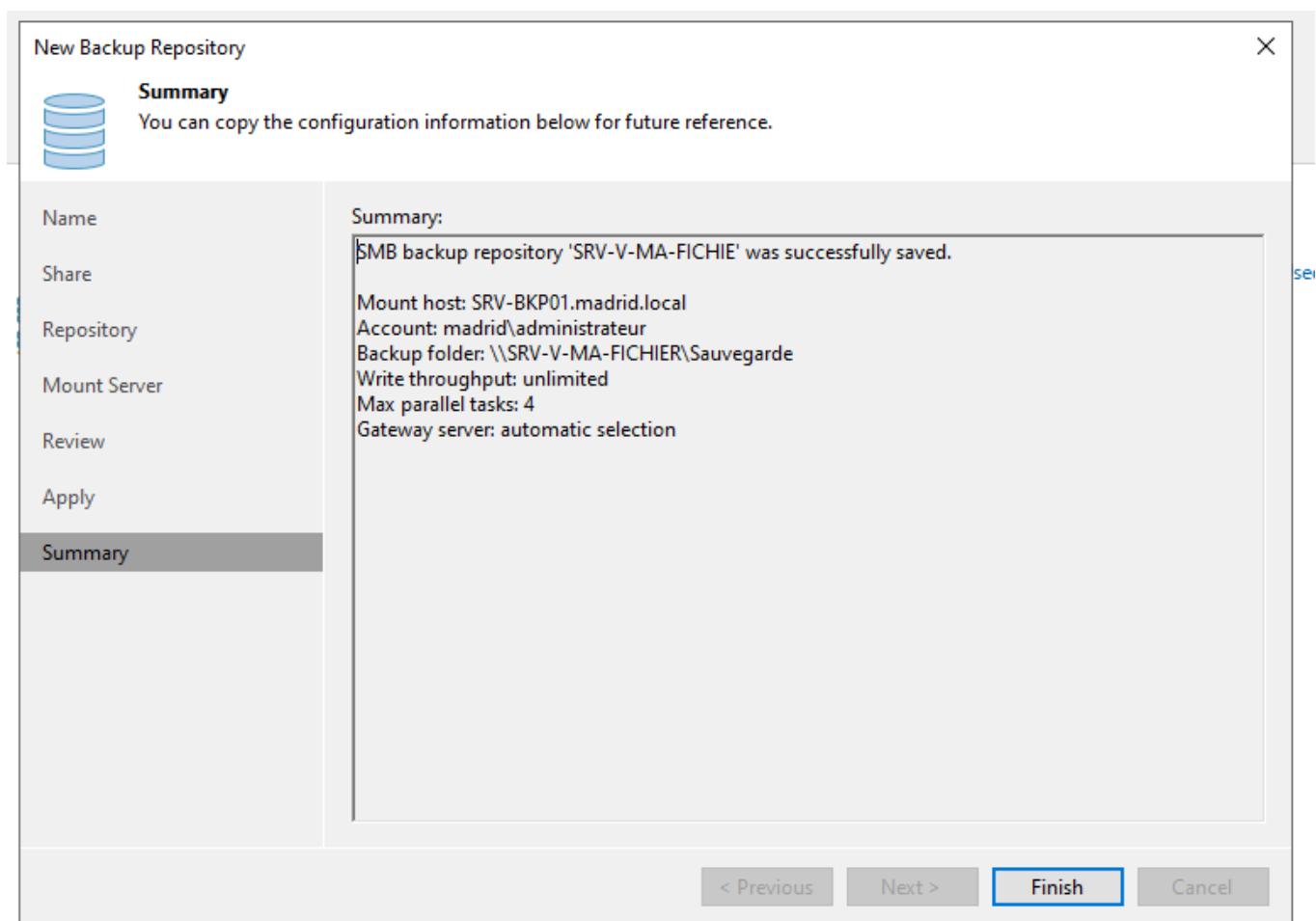
< Previous

**Next >**

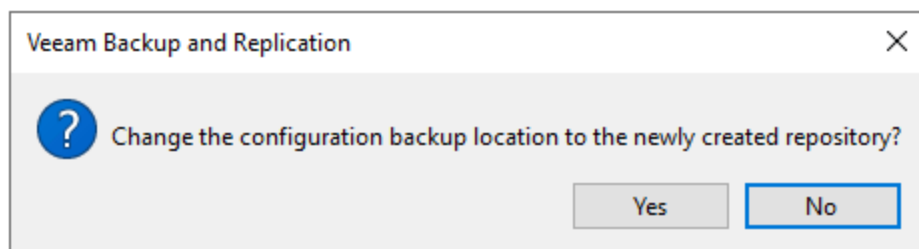
Finish

Cancel

--> le repository a bien été crée.

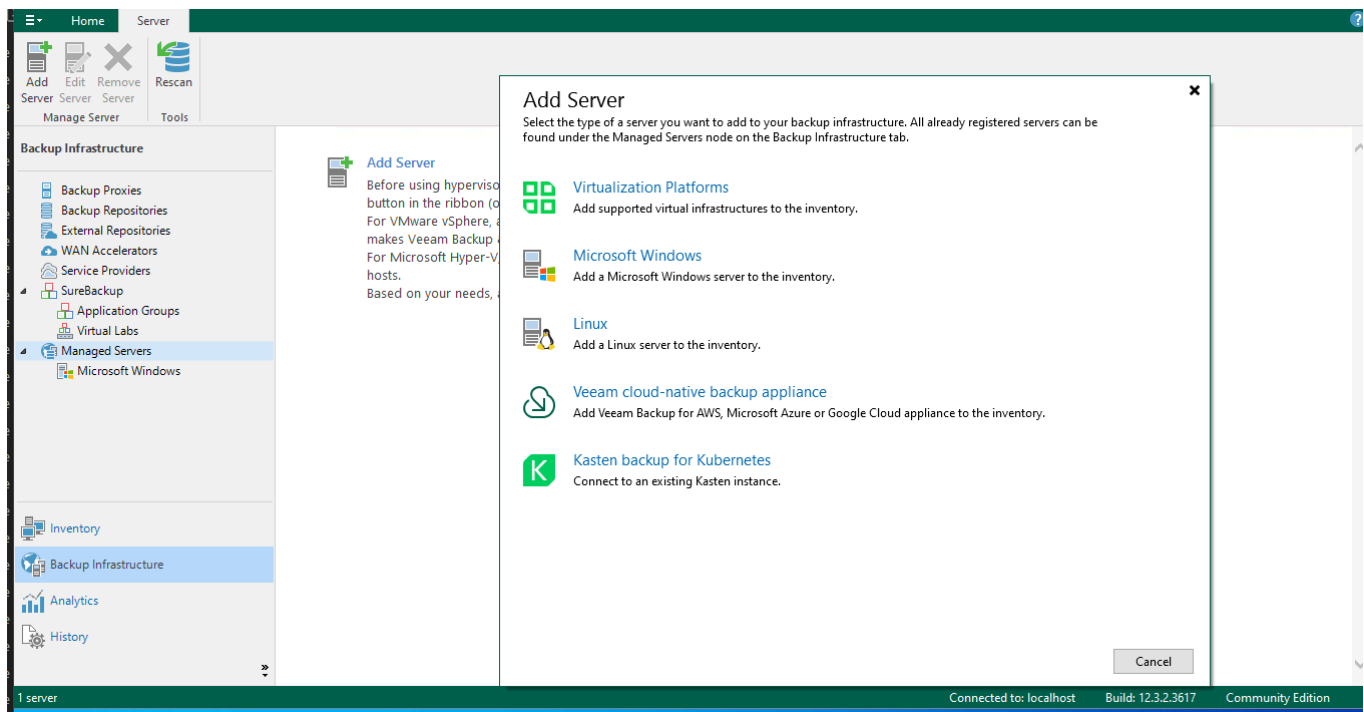


-->permettre que la config de la sauvegarde du serveur ce fasse aussi dans le dossier crée.

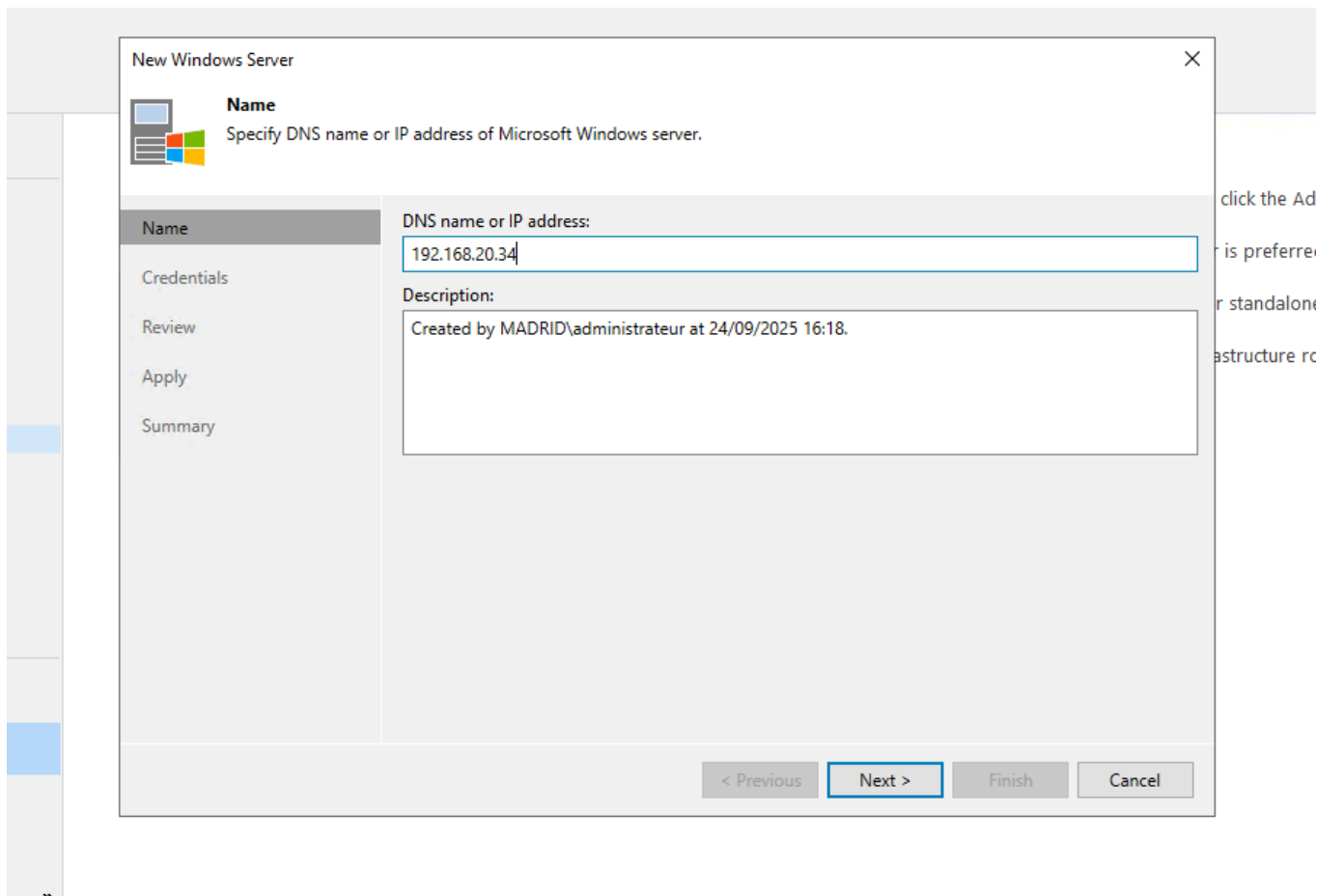


-->Pour le test on va sauvegarder notre serveur Windows AD DNS

-->AJOUT DU SERVEUR DANS VEEAM

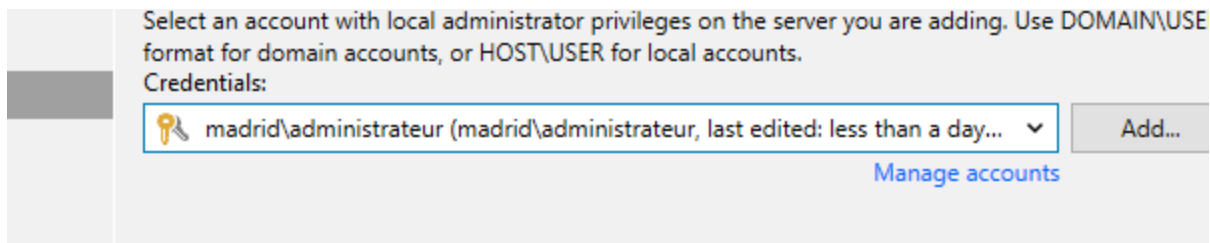


-->Mettre le nom ou l'iP de votre serveur

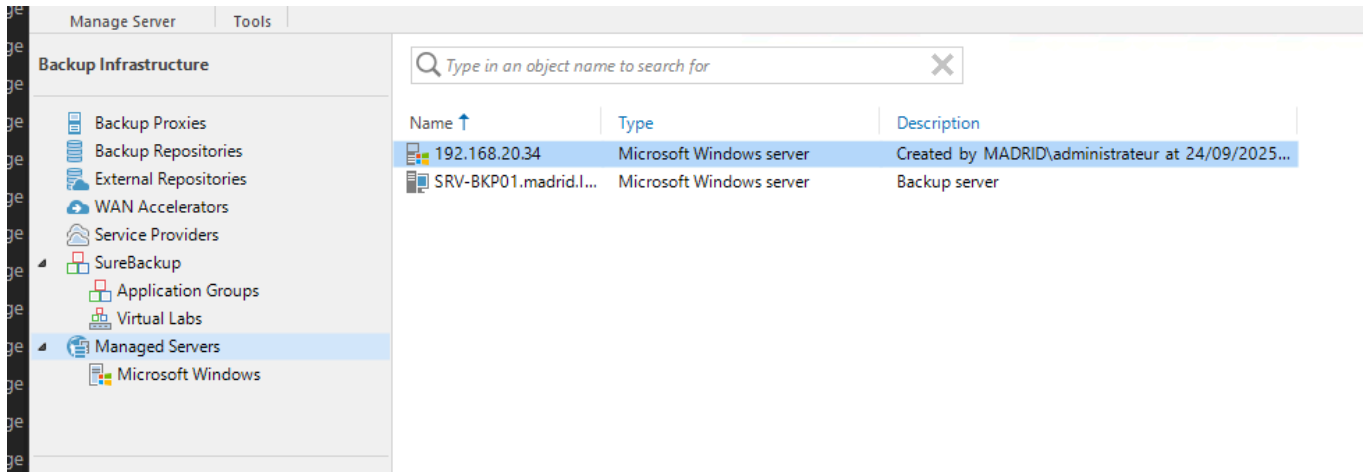


-->S'authentifier avec l'admin du domaine



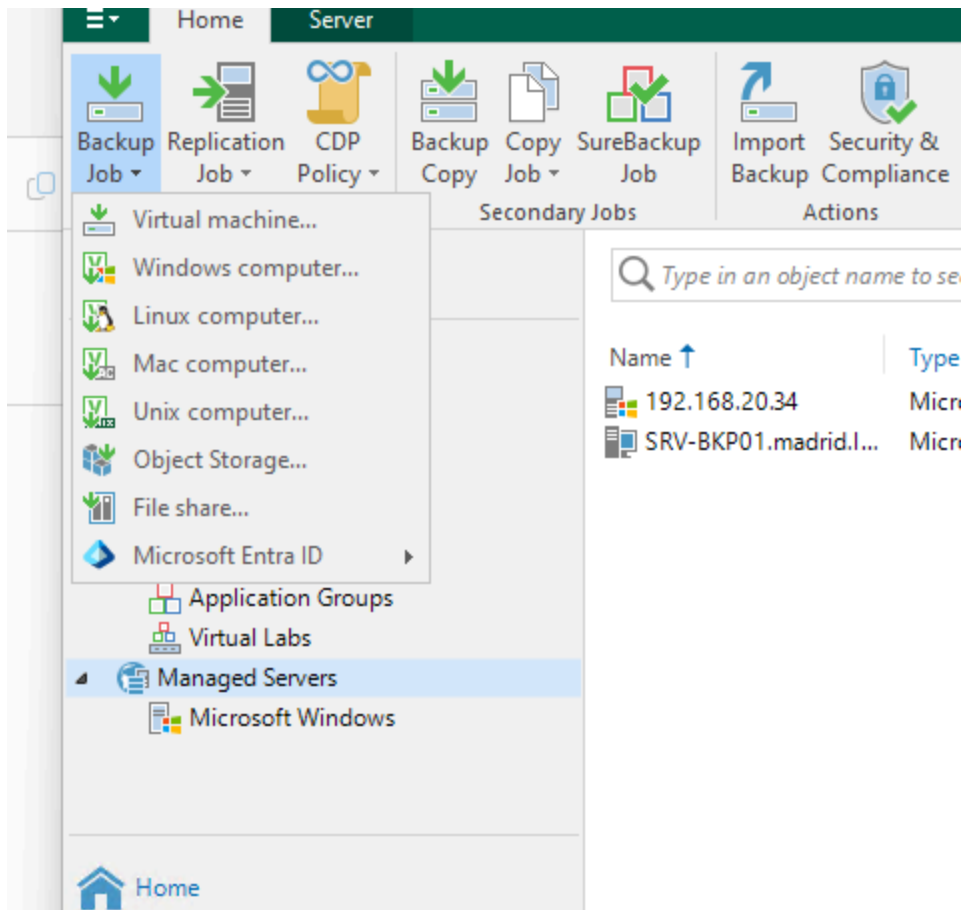


-->Le serveur a bien été ajouté



-->Créer un "Backup Job"

-->WindowsComputer



-->Ici on va sauvegarder notre serveur donc sélectionner "Server"

New Agent Backup Job

**Job Mode**  
Specify protected computer type and backup agent management mode.

**Job Mode**

Name

Computers

Backup Mode

Storage

Guest Processing

Schedule

Summary

Type:

☐ Workstation

☒ Server

☐ Failover cluster

Mode:

☒ **Managed by backup server**  
Veeam backup server schedules and executes backups on the protected computers. This mode is recommended for always-on workloads with a permanent connection to the backup server, such as servers or clusters located in the same data center.

☐ **Managed by agent**  
Veeam backup server deploys the protection policy to all agents, however the job is managed by the agent itself. This mode is recommended for workstations and servers located in remote sites with poor connectivity to the main data center.

< Previous   **Next >**   Finish   Cancel

-->Nommer la sauvegarde

New Agent Backup Job

**Name**  
Type in a name and description for this agent backup job.

**Name**

Computers

Backup Mode

Storage

Guest Processing

Schedule

Summary

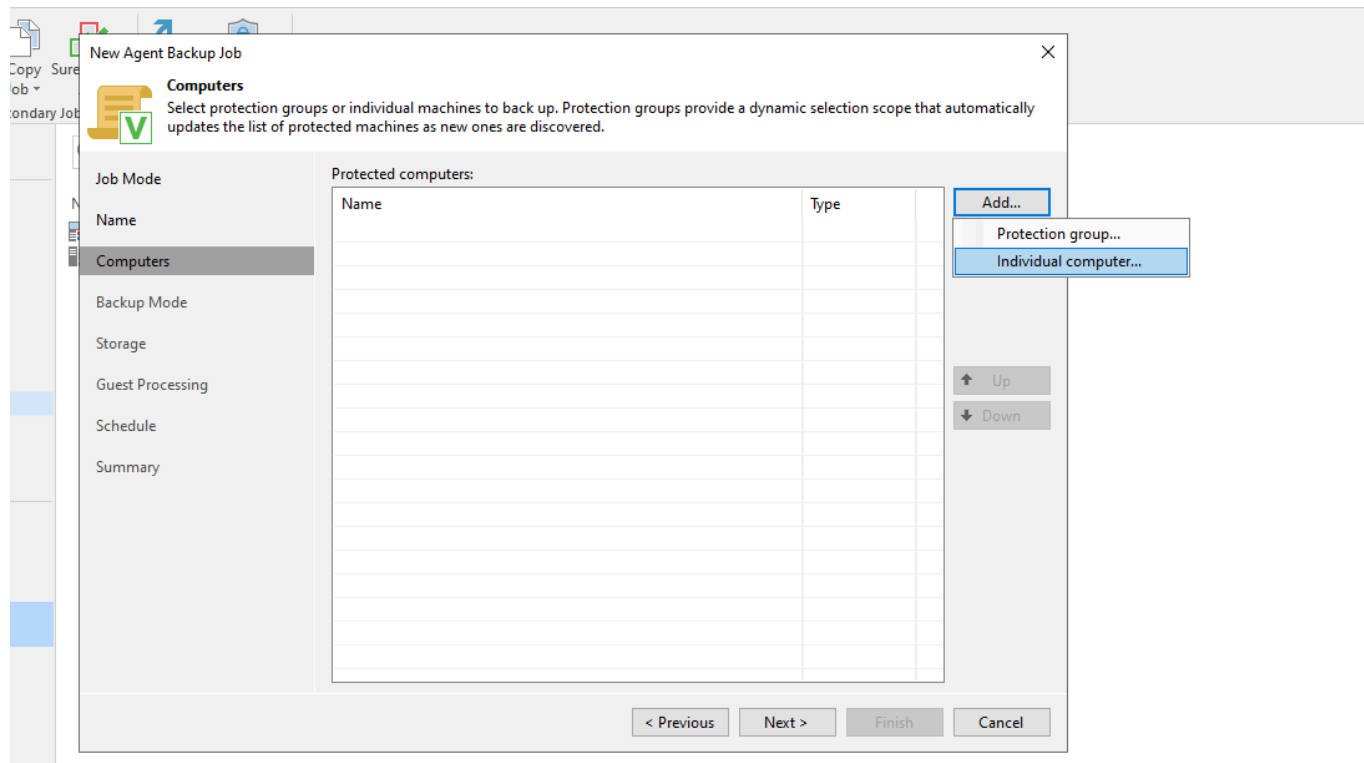
Name:

Sauvegarde\_AD1

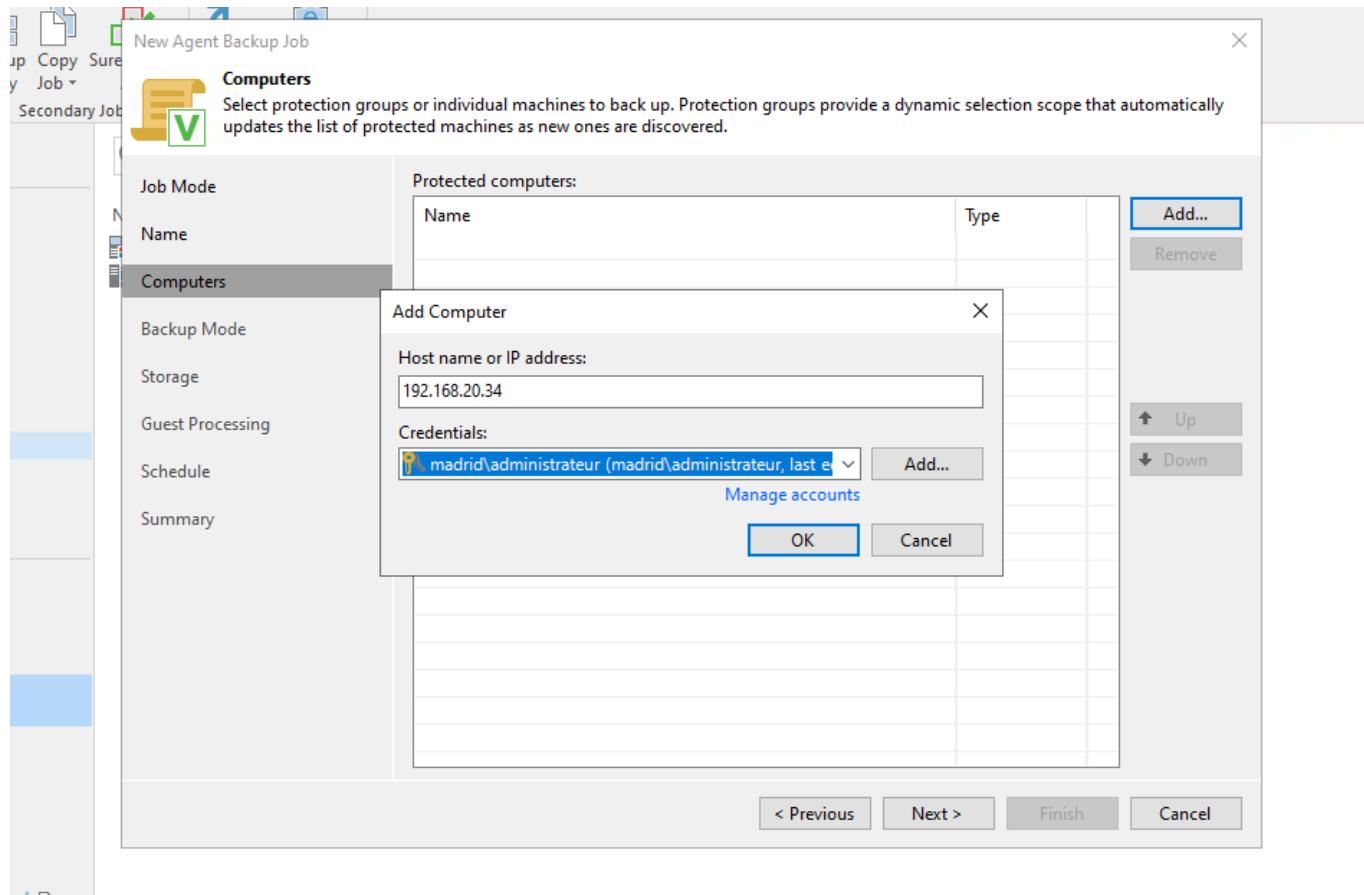
Description:

Created by MADRID\administrateur at 24/09/2025 16:23.

-->Ajouter notre serveur AD qu'on a ajouté précédemment dans veeam



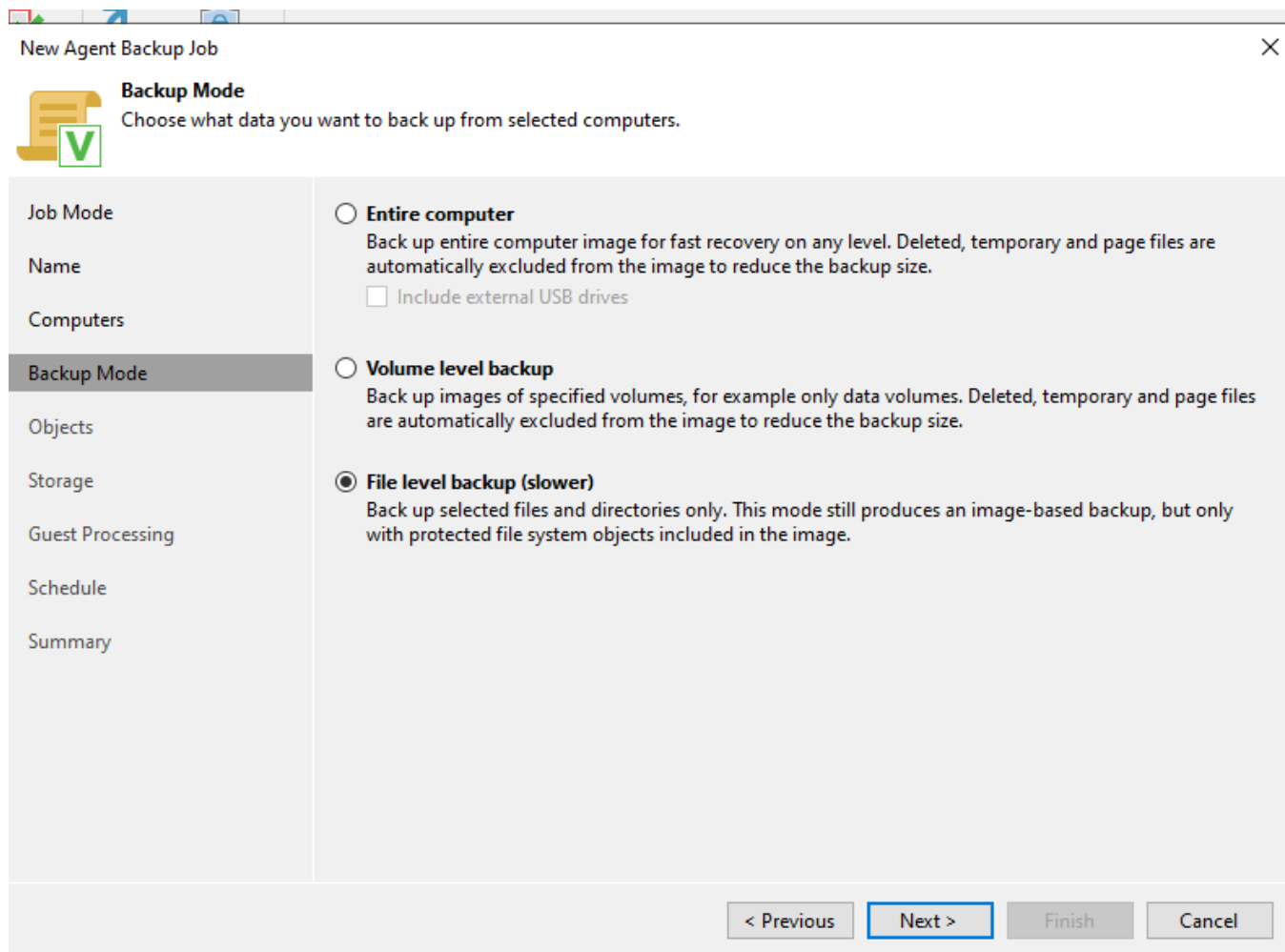
-->Ajouter l'IP et s'authentifier avec l'admin du domaine



-->Choisir le mode de sauvegarde

-->Ici nous allons juste sauvegarder un dossier(sysvol) de notre serveur

-->Sélectionner donc File level backup



The screenshot shows a window titled "New Agent Backup Job" with a close button (X) in the top right corner. Below the title bar, there is a "Backup Mode" section with a yellow folder icon and a green checkmark. The text "Choose what data you want to back up from selected computers." is displayed. On the left side, there is a vertical list of options: "Job Mode", "Name", "Computers", "Backup Mode" (which is highlighted), "Objects", "Storage", "Guest Processing", "Schedule", and "Summary". The main area on the right contains three radio button options: "Entire computer" (unselected), "Volume level backup" (unselected), and "File level backup (slower)" (selected). Each option has a descriptive text block. At the bottom right, there are four buttons: "< Previous", "Next >" (highlighted with a blue border), "Finish", and "Cancel".

New Agent Backup Job

**Backup Mode**  
Choose what data you want to back up from selected computers.

Job Mode  
Name  
Computers  
**Backup Mode**  
Objects  
Storage  
Guest Processing  
Schedule  
Summary

☐ **Entire computer**  
Back up entire computer image for fast recovery on any level. Deleted, temporary and page files are automatically excluded from the image to reduce the backup size.  
☐ Include external USB drives

☐ **Volume level backup**  
Back up images of specified volumes, for example only data volumes. Deleted, temporary and page files are automatically excluded from the image to reduce the backup size.

☒ **File level backup (slower)**  
Back up selected files and directories only. This mode still produces an image-based backup, but only with protected file system objects included in the image.

< Previous   Next >   Finish   Cancel

-->Comme dit précédemment on veut sauvegarder seulement le dossier sysvol de notre serveur.

-->Spécifier le chemin du dossier

New Agent Backup Job

**Objects**  
Specify objects you would like to include in the backup.

Job Mode  
Name  
Computers  
Backup Mode  
**Objects**  
Storage  
Guest Processing  
Schedule  
Summary

Objects to backup:  
☐ Operating system  
☐ Personal files  
 Include: Desktop, Documents, Pictures, Video, Music, Favorites, Downloads, Other files and... [Choose...](#)  
☒ The following file system objects:
 

Object	

[Add...](#)

**Add Object**  
 Volume name or path to a directory:  
  
 Example: C:\Users  
[OK](#) [Cancel](#)

To specify file exclusion settings, click Advanced [Advanced](#)

< Previous Next > Finish Cancel

-->!!Ne pas oublier de changer le Backup repository

Edit Agent Backup Job Sauvegarde\_AD1

**Storage**  
Specify a backup repository to store the backup files produced by the backup job and customize advanced job settings if required.

Job Mode  
Name  
Computers  
Backup Mode  
Objects  
**Storage**  
Guest Processing  
Schedule  
Summary

Backup repository:  
 SRV-V-MA-FICHER (Created by MADRID\administrateur at 24/09/2025 15:40.)  
 7,5 GB free of 19,3 GB [Map backup](#)  
 Retention policy: 7 days  
☐ Keep certain full backups longer for archival purposes  
 GFS retention policy is not configured [Configure...](#)  
☐ Configure secondary destinations for this job  
 Copy backups produced by this job to another backup repository, or tape. We recommend to make at least one copy of your backups to a different storage device that is located off-site.  
 Advanced job settings include backup mode, compression and deduplication, block size, notification settings, automated post-job activity and other settings. [Advanced...](#)

< Previous **Next >** Finish Cancel

Processing SRV-V-AD-MA.madrid.local

New Agent Backup Job

**Summary**

The job's settings have been saved successfully. Click Finish to exit the wizard.

Job Mode

Name

Computers

Backup Mode

Objects

Storage

Guest Processing

Schedule

Summary

Summary:

Configuration has been successfully saved.  
Name: Sauvegarde\_AD1  
Description: Created by MADRID\administrateur at 24/09/2025 16:23.  
Type: server  
Mode: managed by backup server  
Protected computers:  
192.168.20.34  
Backup mode: file level backup  
Destination: Veeam backup repository  
Target storage: Default Backup Repository  
Retention policy: 7 days  
Application-aware processing is enabled  
Backup is not scheduled to run automatically  
GFS retention policy: not set

☒ Run the job when I click Finish

< Previous

Next >

Finish

Cancel

-->La sauvegarde a bien été programmé et est en cours

Primary JobsSecondary JobsActions

Inventory

Malware Detection

Virtual Infrastructure

Physical Infrastructure

Manually Added

Unmanaged

Unstructured Data

Microsoft Entra ID

Last 24 Hours

Running (1)

Success

Home

Type in an object name to search for

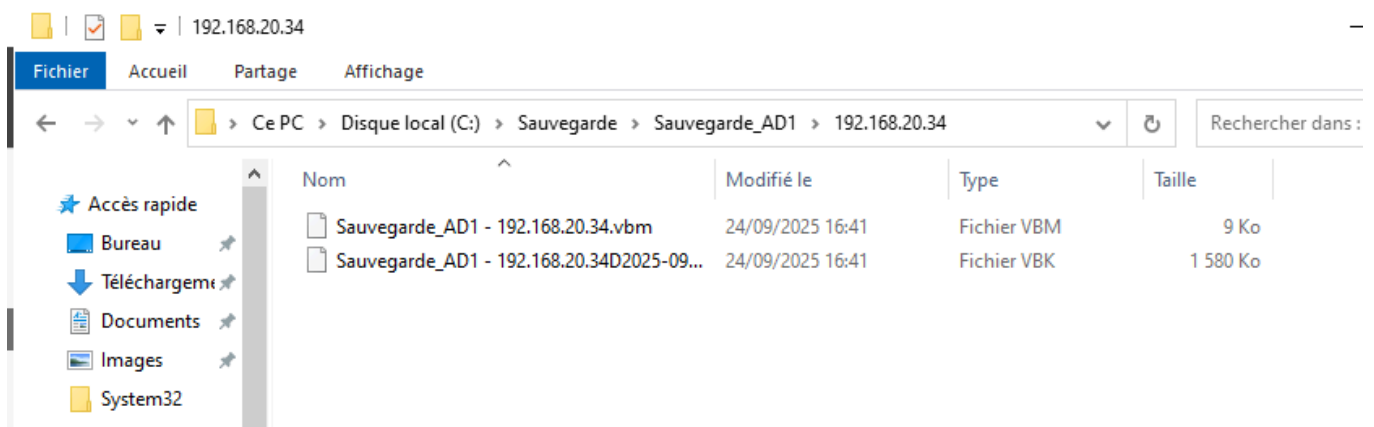
Job Name	Session Type	Status	Start Time ↓
Rescan of Sauvegarde_AD1	Rescan	Working	24/09/2025 16:33

-->La sauvegarde a bien été réalisé avec succès.

Type in an object name to search for					
Job Name	Session Type	Status	Start Time ↓	End Time	
Rescan of Sauvegarde_AD1	Rescan	Success	24/09/2025 16:33	24/09/2025 16:34	
Host Discovery	Volume Discove...	Success	24/09/2025 16:21	24/09/2025 16:21	
Host Discovery	Volume Discove...	Success	24/09/2025 15:21	24/09/2025 15:22	

-->retourner dans le serveur de fichier et vérifier si la sauvegarde a bien été effectué.

-->Les sauvegardes sont bien disponibles dans le dossier



## CONCLUSION

La mise en place d'un serveur de sauvegarde avec Veeam m'a permis de mieux comprendre l'importance de la protection des données en entreprise. Ce projet m'a apporté des compétences techniques, notamment dans l'installation, la configuration et la gestion d'un outil de sauvegarde professionnel. Il m'a aussi sensibilisé aux bonnes pratiques en matière de sécurité informatique. Cette expérience est une base solide pour continuer à me former aux solutions d'administration système et réseau.