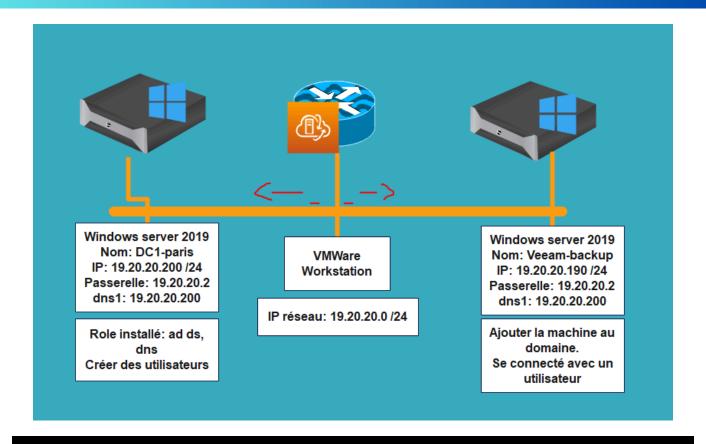
# SAUVEGARDE & RESTAURATION D'UN OBJET ACTIVE DIRECTORY AVEC VEEAM BACKUP & REPLICATION 12







ADMINISTRATEUR

D'INFRASTRUCTURE

SYSTÈMES ET RÉSEAUX

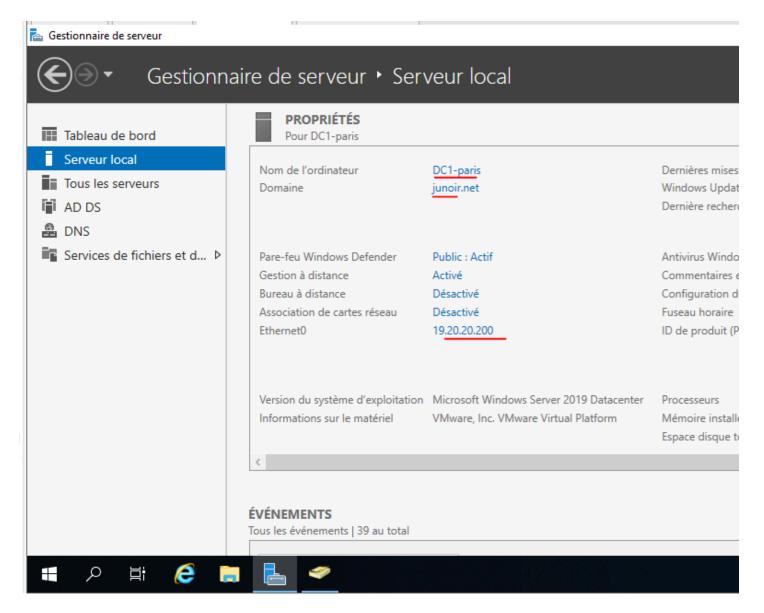
\

Parcourez votre leçon à l'aide de ce guide pour vous focaliser sur les points importants.

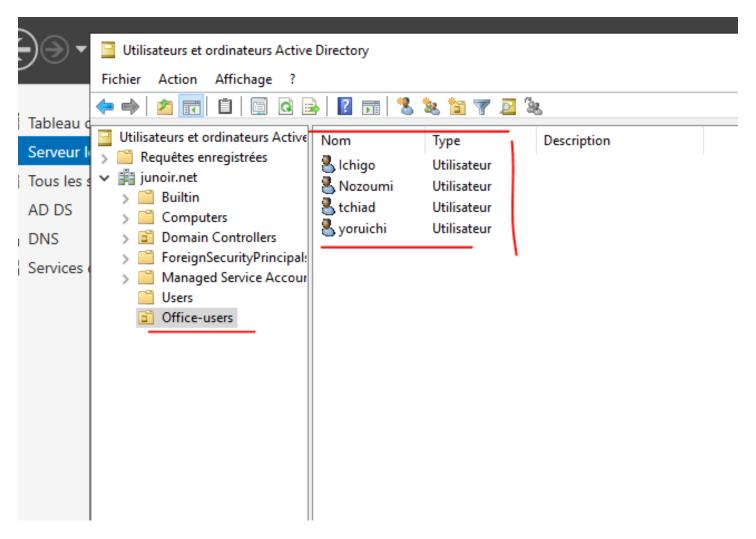
NOM: POUMINA.M JUDE CHRYST

# <u>Etape1: Démarrer un serveur Active</u> <u>Directory</u>

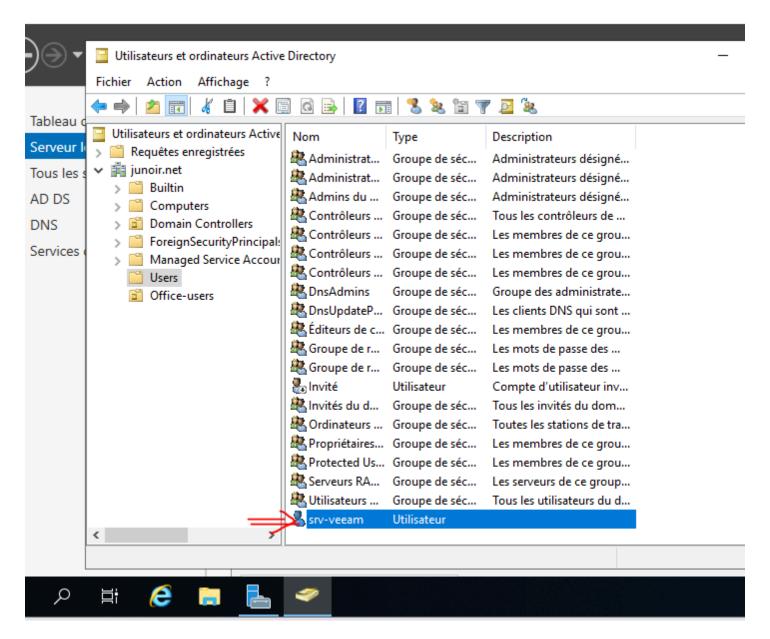
1. Ce serveur doit être configuré avec le **nom de l'ordinateur**, l'intégration à un **domaine Active Directory (AD DS)**, la configuration du **DNS**, ainsi qu'une **adresse IP statique**.



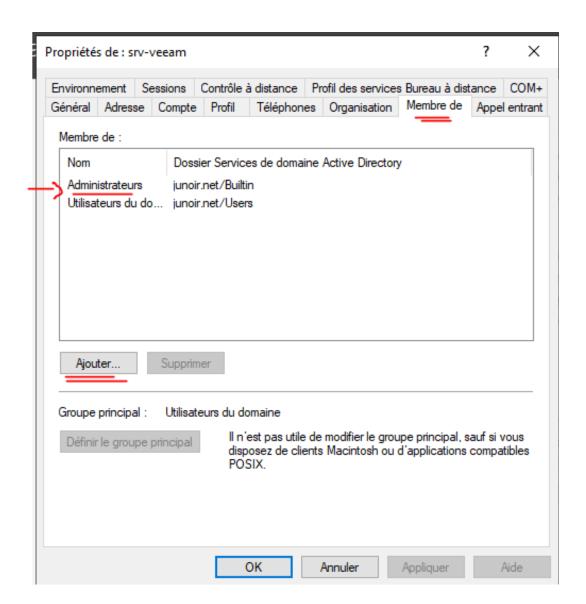
1. Pour créer des utilisateurs dans le domaine, accédez à **Utilisateurs et ordinateurs Active Directory**, puis ajoutez les nouveaux comptes en suivant les étapes appropriées.



1. Dans l'OU **Users**, créez un compte utilisateur **srv-veeam** destiné au serveur **Veeam Backup**.



1. Faites un **clic droit** sur l'utilisateur **srv-veeam**, puis allez dans **Propriétés**. Ensuite, accédez à l'onglet **Membre de**, cliquez sur **Ajouter**, et ajoutez le groupe **Administrateurs**.



# <u>Etape2: Démarrer un serveur Veeam</u> <u>Backup</u>

Non, il n'est pas nécessaire d'ajouter le rôle **AD DS (Active Directory Domain Services)** sur un serveur destiné à **Veeam Backup & Replication**.

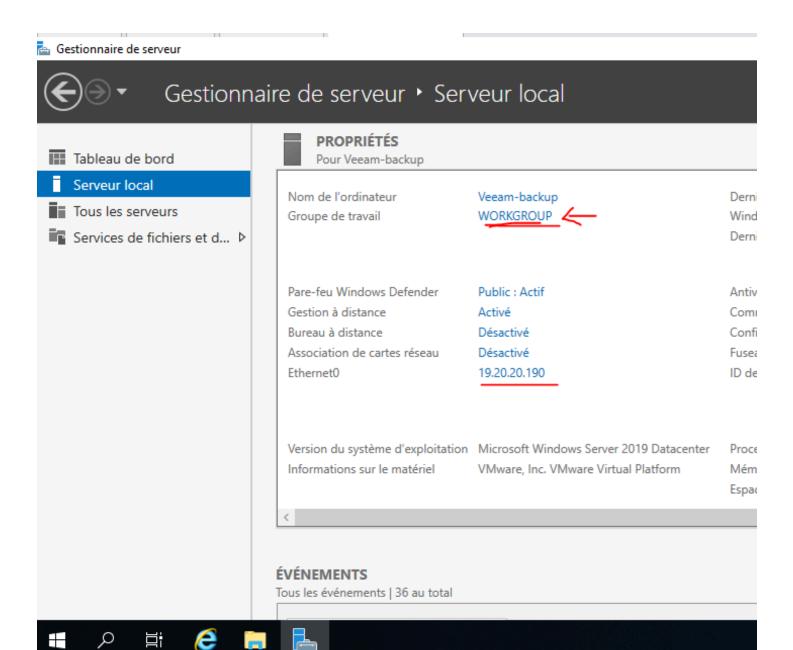
## Pourquoi ne pas ajouter AD DS?

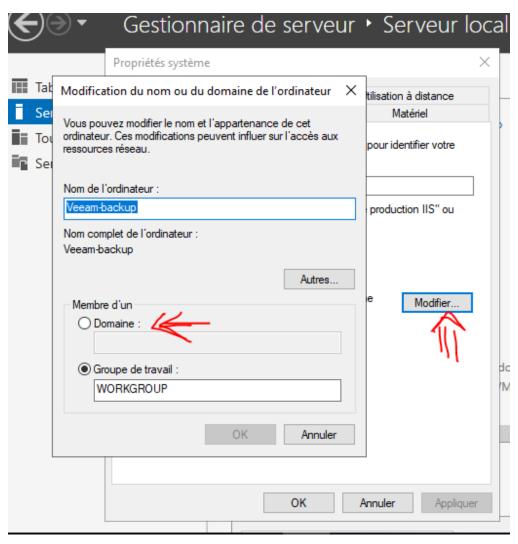
- Séparation des rôles : Un serveur de sauvegarde ne doit pas être un contrôleur de domaine pour des raisons de sécurité et de performance.
- 2. **Risque de corruption** : En cas de panne du serveur Veeam, l'Active Directory pourrait être impacté si ce serveur hébergeait AD DS.
- 3. **Meilleure gestion des permissions** : Veeam peut s'authentifier sur le domaine sans avoir besoin d'être un contrôleur de domaine. Il suffit de créer un compte de service avec les permissions adéquates.
- 4. **Performance et charge** : AD DS et Veeam consomment des ressources, et les exécuter sur le même serveur peut ralentir les performances globales.

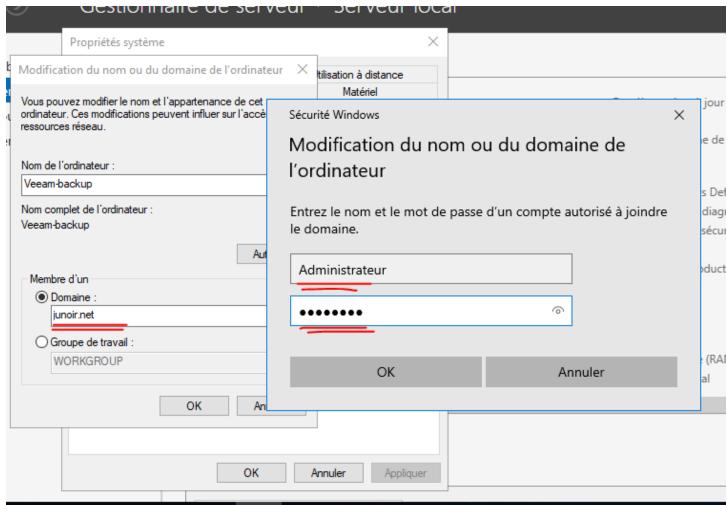
## Bonne pratique

- Installer Veeam Backup & Réplication sur un serveur dédié.
- Assurer que ce serveur est membre du domaine mais n'est pas un contrôleur de domaine.
- Utiliser un compte de service avec les permissions nécessaires pour accéder aux machines à sauvegarder.

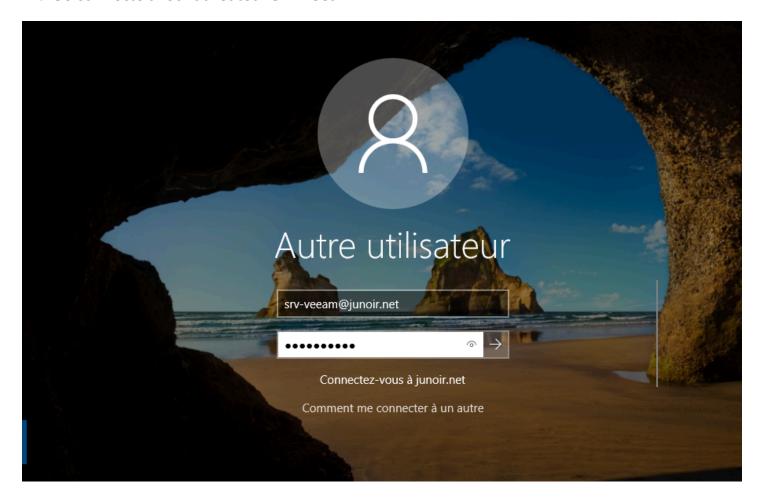
- 1. Ce serveur doit être configuré avec le **nom de l'ordinateur**, l'intégration au **domaine Active Directory (AD DS)**, la configuration du **DNS**, ainsi qu'une **adresse IP statique**.
- 2. clic sur Groupe de travail



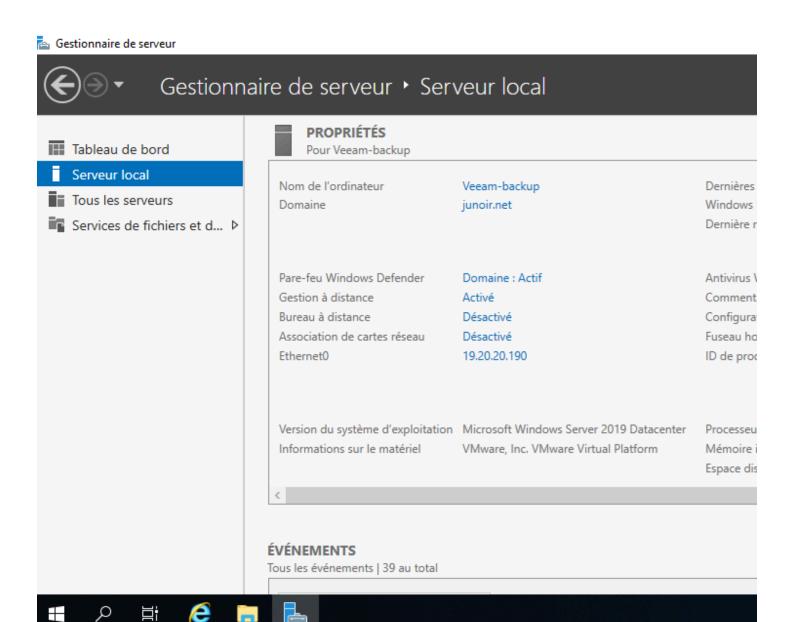




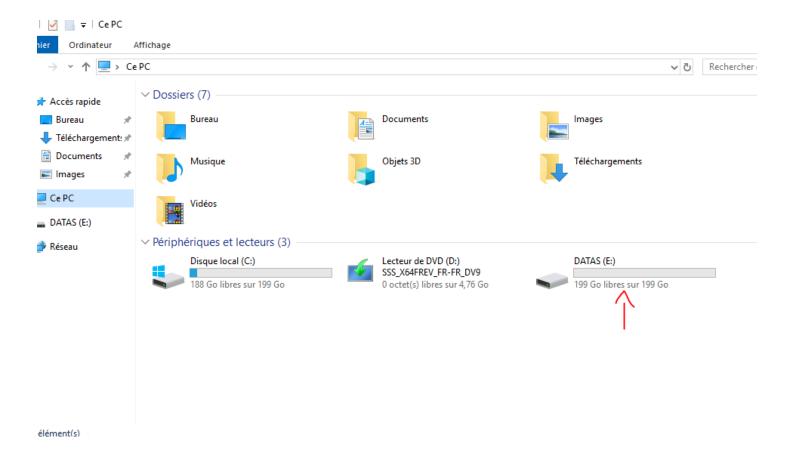
# 1. Se connecté avec l'utilisateur **srv-veeam**



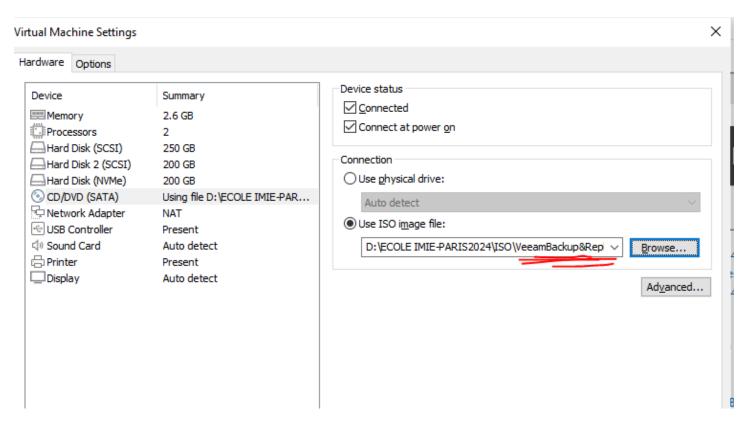
□ RESULTAT



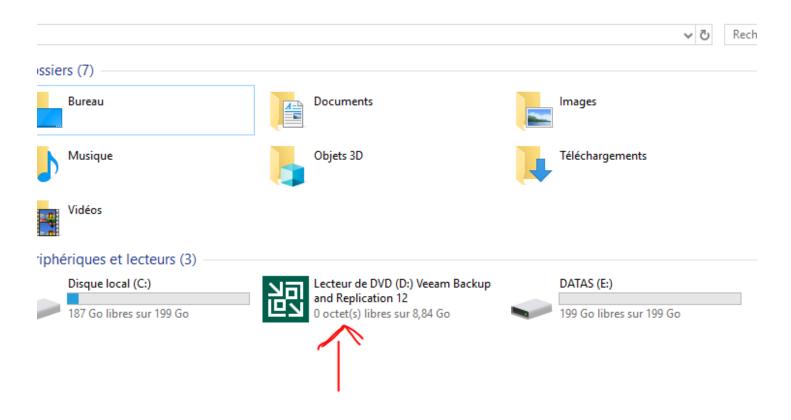
1. Ajouter un second disque dur dédié à la sauvegarde avec **Veeam Backup** 



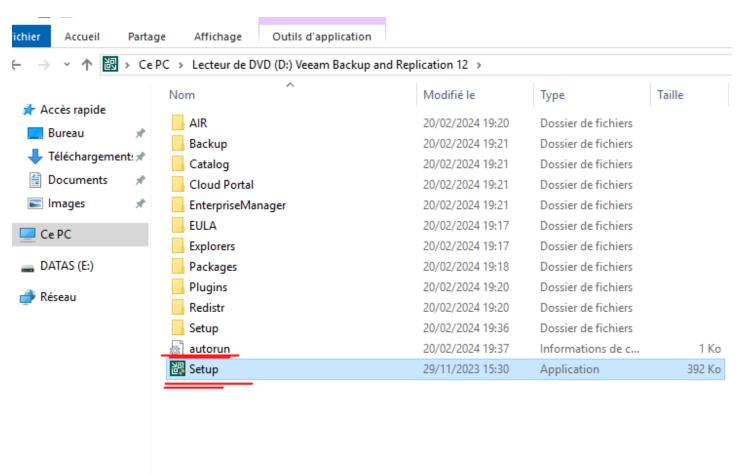
1. Il est maintenant nécessaire d'ajouter l'**ISO** de **Veeam Backup & Replication 12** afin de procéder à son installation et à sa configuration.

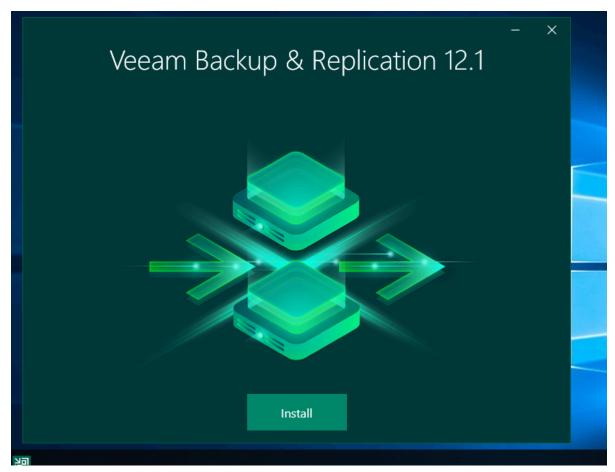


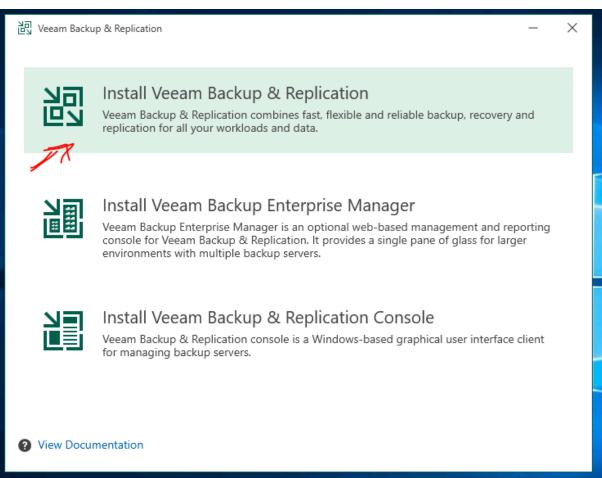
1. Faire un clic droit sur veeam puis appuyer sur Ouvrir

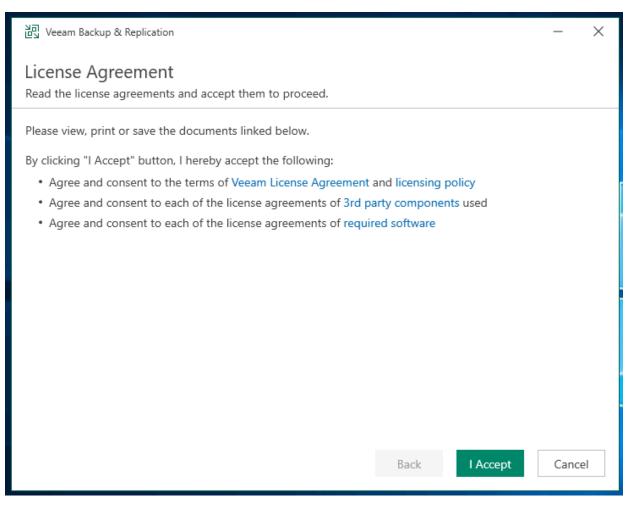


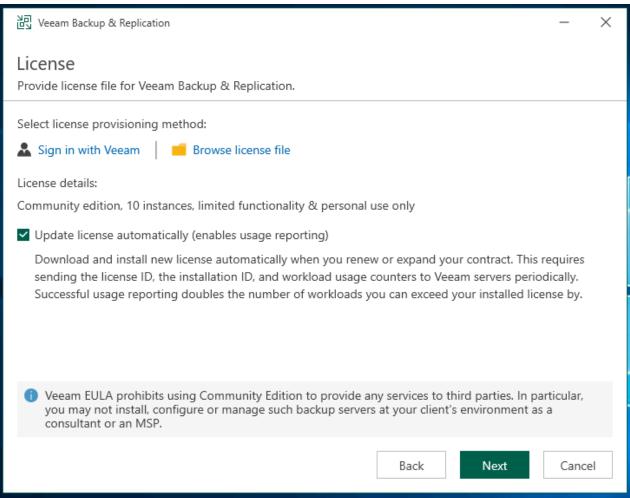
### 1. Faire un double clic sur **setup**

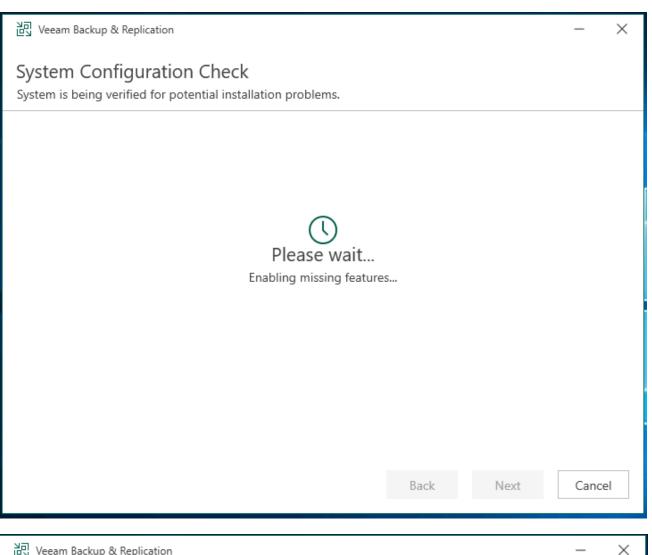


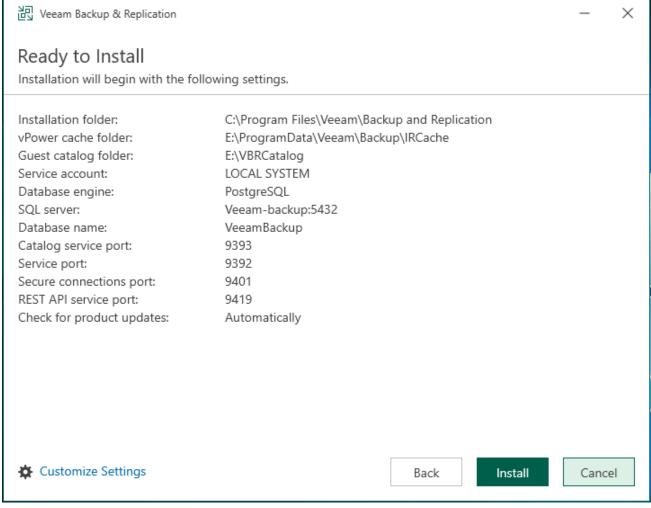














# Installing Veeam Backup & Replication

Please wait, installation may require significant time.

#### Step 2 of 7:

Installing Veeam Backup & Replication Server...



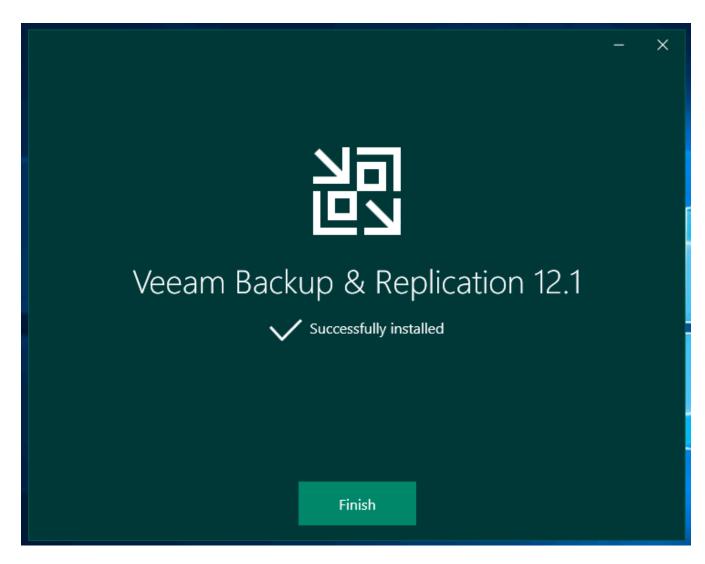
# Secure, centralized key management

Eliminate the need for storing backup encryption keys in the configuration database and rotating them manually by integrating with an external Key Management Server (KMS).

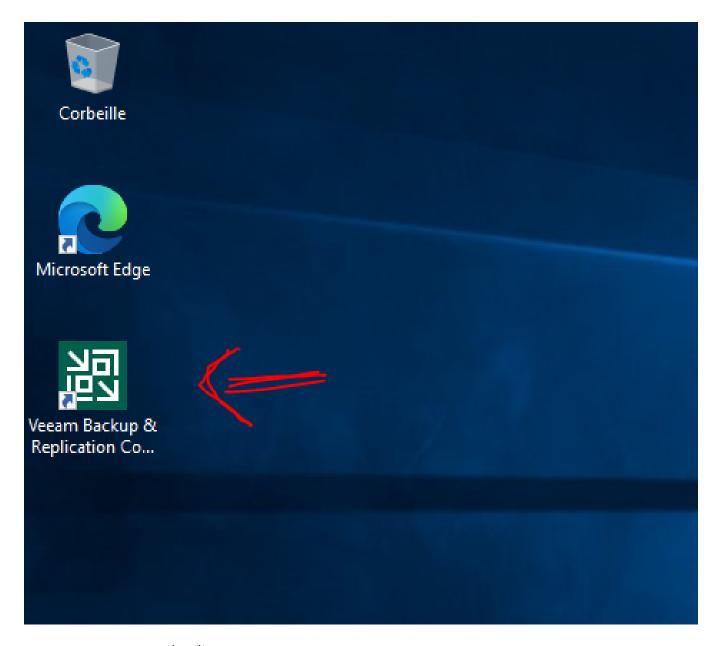
Back

Install

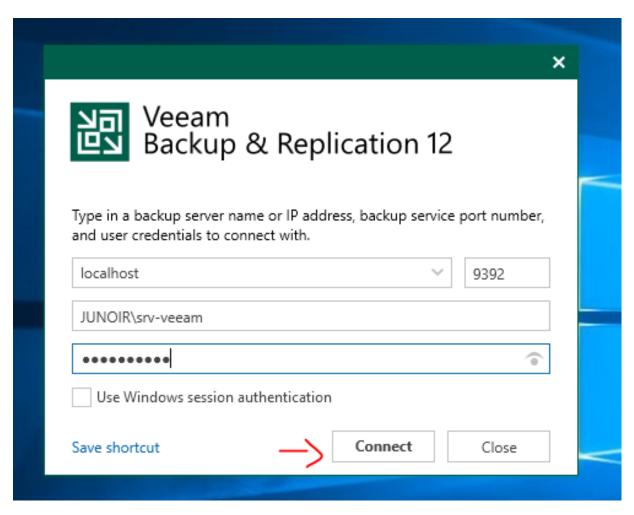
Cancel



1. Ouvrir l'application veeam backup

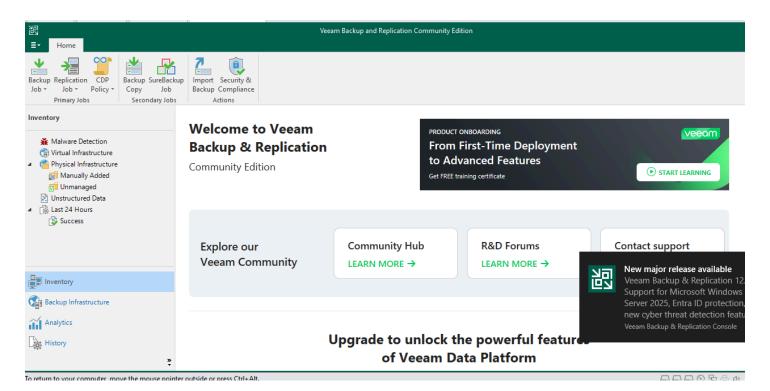


- 1. Se connecter avec l'utilisateur **srv-veeam**
- 2. Décocher la case Use Windows session authentication

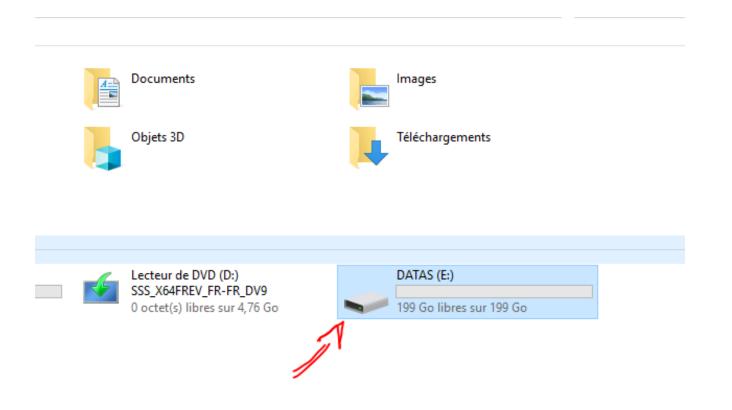


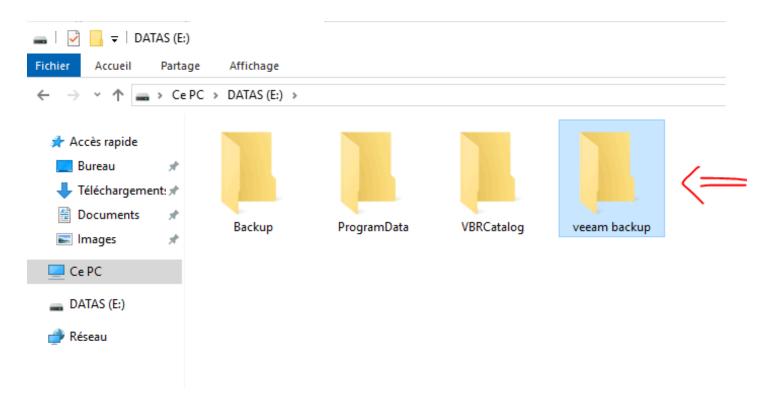


1. Bienvenue dans la console **veeam backup** 

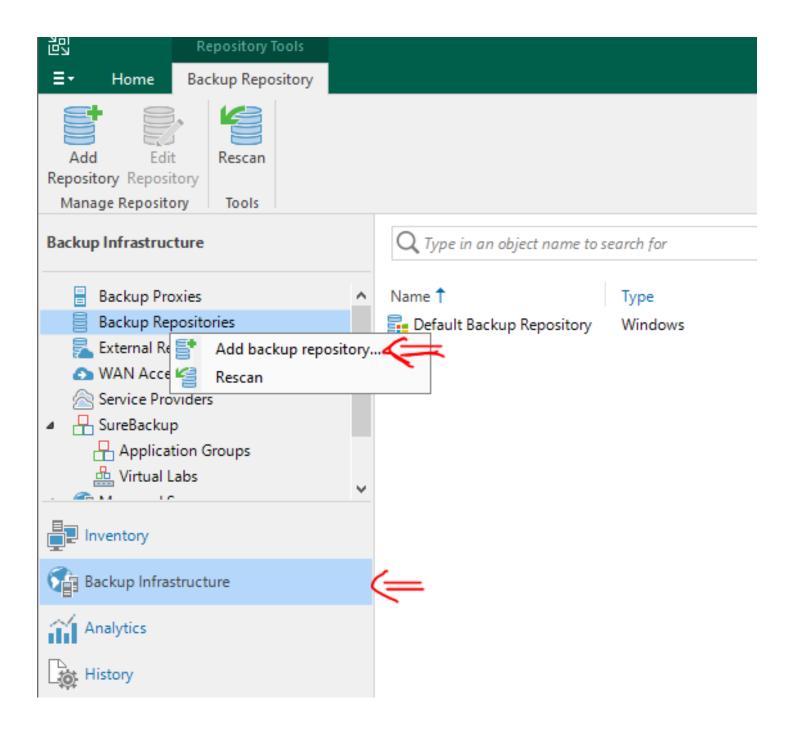


1. À présent, accédez au disque dur que vous avez ajouté et créez un dossier où toutes les sauvegardes seront stockées.





- 1. Repartir dans la console **veeam backup**
- 2. Dans Veeam Backup & Replication, cette action permet d'ajouter un emplacement de stockage pour les sauvegardes :
- 3. Cliquez sur "Backup Infrastructure" dans le menu principal.
- 4. **Faites un clic droit sur "Backup Repositories"** (qui gère les emplacements de stockage des sauvegardes).
- 5. **Sélectionnez "Add Backup Repository"** pour ajouter un nouvel espace de stockage (disque local, NAS, cloud, etc.).
- 6. Cela permet à Veeam de savoir où enregistrer les sauvegardes.



# Add Backup Repository

Select the type of backup repository you want to add.



#### Direct attached storage



Microsoft Windows or Linux server with Internal or direct attached storage. This configuration enables data movers to run directly on the server, allowing for fastest performance.



#### Network attached storage

Network share on a file server or a NAS device. When backing up to a remote share, we recommend that you select a gateway server located in the same site with the share.



#### Deduplicating storage appliance

Dell Data Domain, ExaGrid, Fujitsu ETERNUS CS800, HPE StoreOnce, Infinidat InfiniGuard or Quantum DXi. If you are unable to meet the requirements of advanced integration via native appliance API, use the network attached storage option instead.



#### Object storage

On-prem object storage system or a cloud object storage provider.



# Direct Attached Storage

Select the operating system type of a server you want to use as a backup repository.



#### Microsoft Windows



Adds local storage presented as a regular volume or Storage Spaces. For better performance and storage efficiency, we recommend using ReFS.



#### Linux

Adds local storage or locally mounted NFS share. For better performance and storage efficiency, we recommend using XFS. The Linux server must use bash shell, and have SSH and Perl installed.



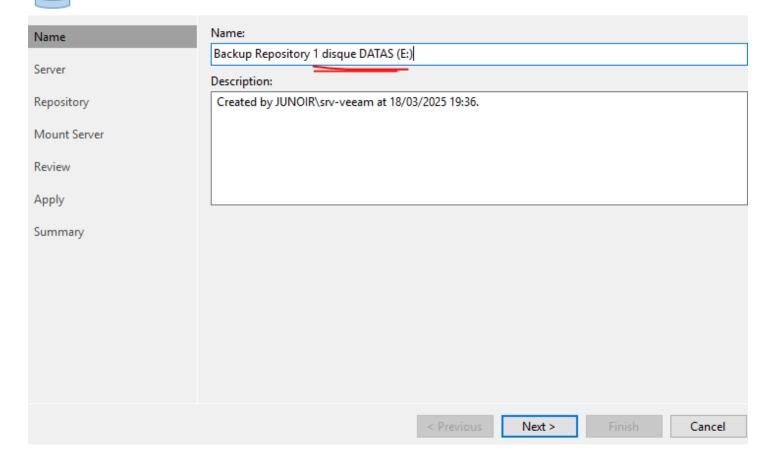
#### Linux (Hardened Repository)

Requires a Linux server with internal or direct attached storage. This configuration enables protection against cybersecurity threats with immutable backups. The Linux server must use bash shell and have SSH installed. For reduced attack surface, minimal Linux installation is highly recommended.



#### Name

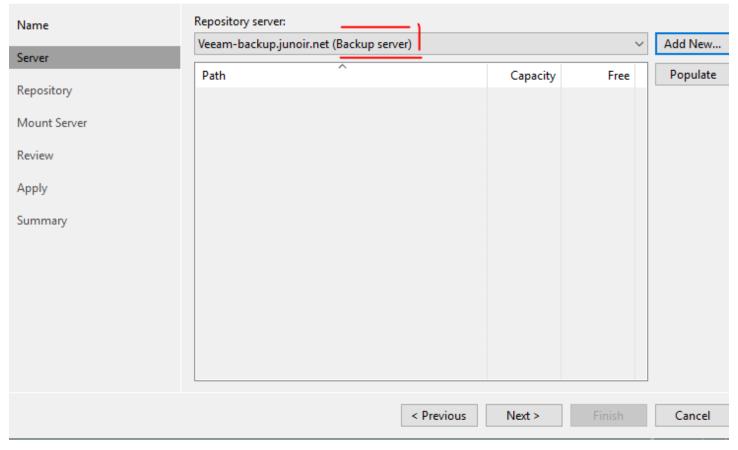
Type in a name and description for this backup repository.



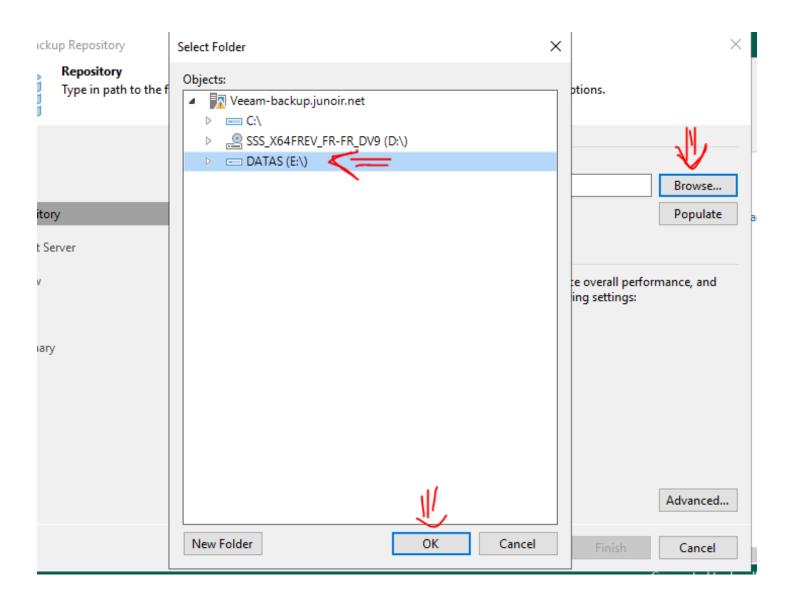


#### Server

Choose repository server. You can select server from the list of managed servers added to the console.



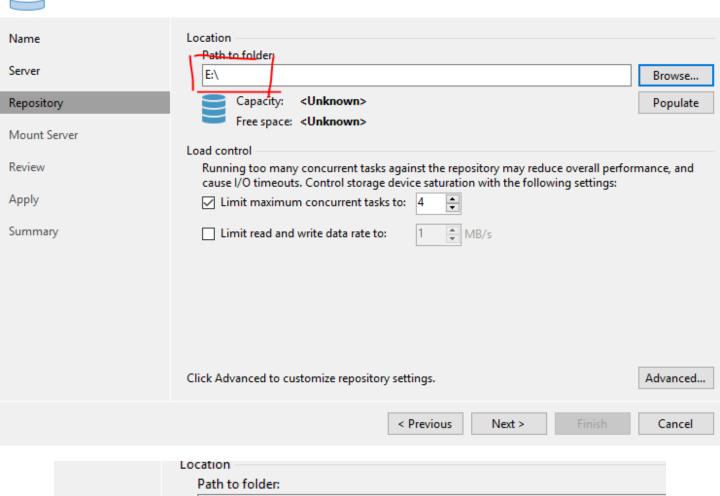
1. **Cliquez sur "Veeam-backup.junoir.net"** et choisissez DATAS(E:\)

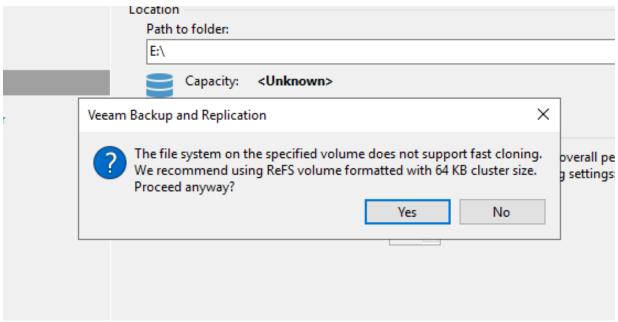




#### Repository

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

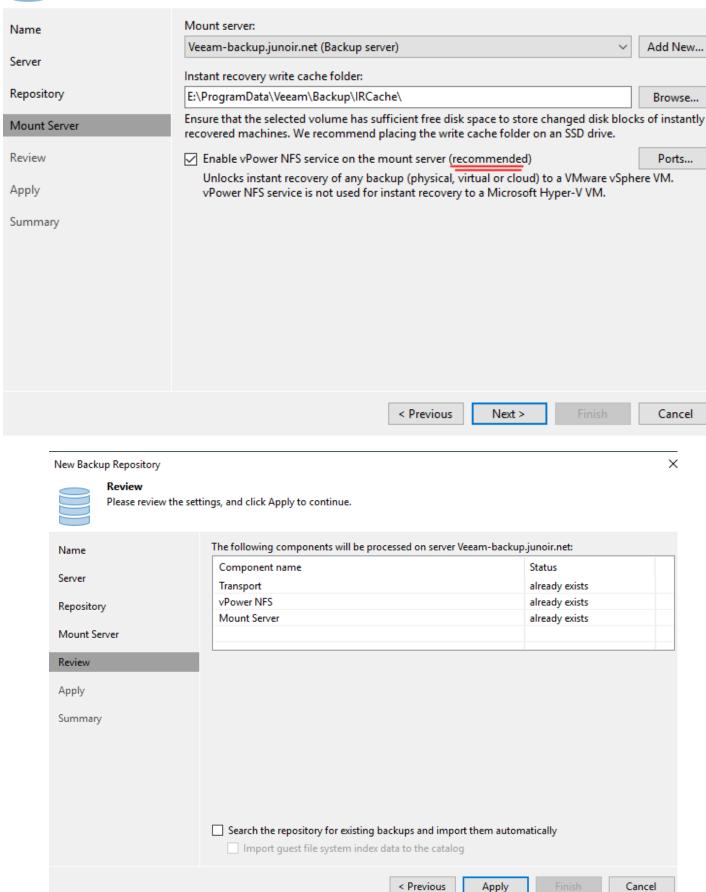






#### Mount Server

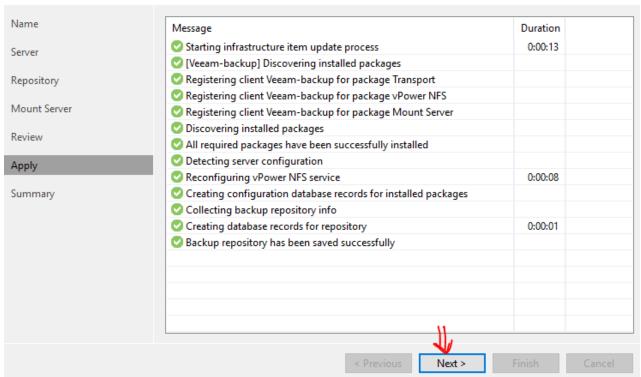
Specify a server to mount backups to when performing advanced restores (file, application item and instant VM recoveries). Instant recoveries require a write cache folder to store changed disk blocks in.





#### Apply

Please wait while backup repository is created and saved in configuration, this may take a few minutes.

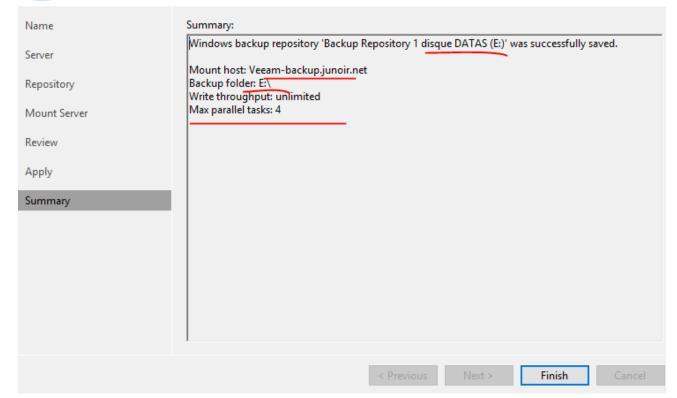


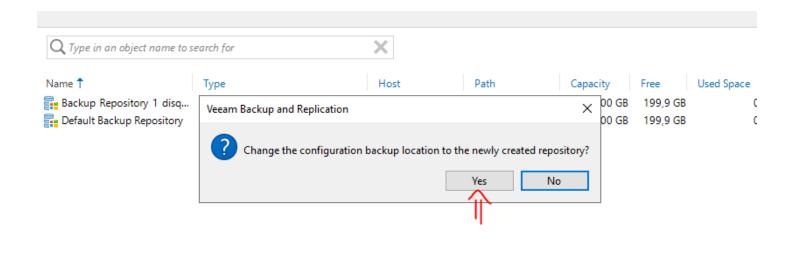
New Backup Repository

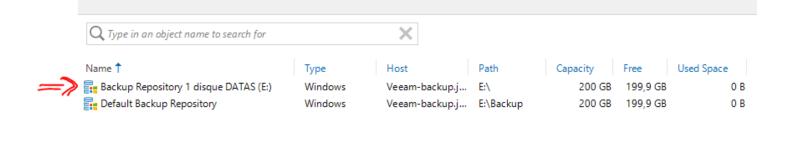


#### Summary

You can copy the configuration information below for future reference.

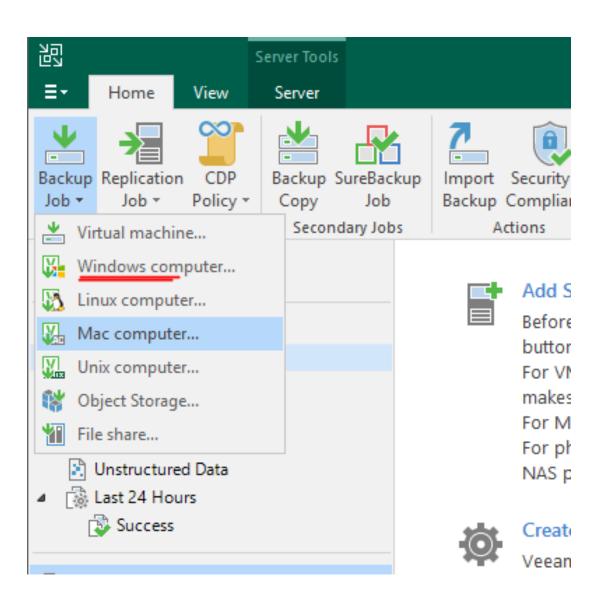






# <u>Etape3: Démarrer la sauvegarde de votre</u> <u>Active Directory</u>

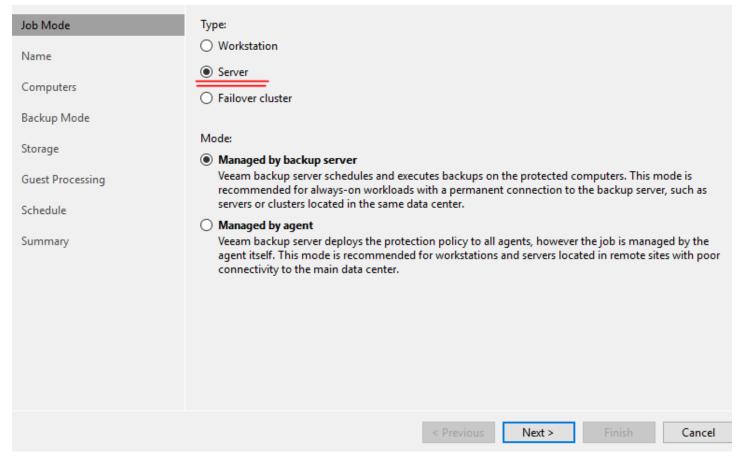
- 1. clic droit sur Backup Job
- 2. Choisir Windows Computer





#### Job Mode

Specify protected computer type and backup agent management mode.



1. Donner un nom pour votre sauvegarde et faire une description, pour moi c'est mon AD



#### Name

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

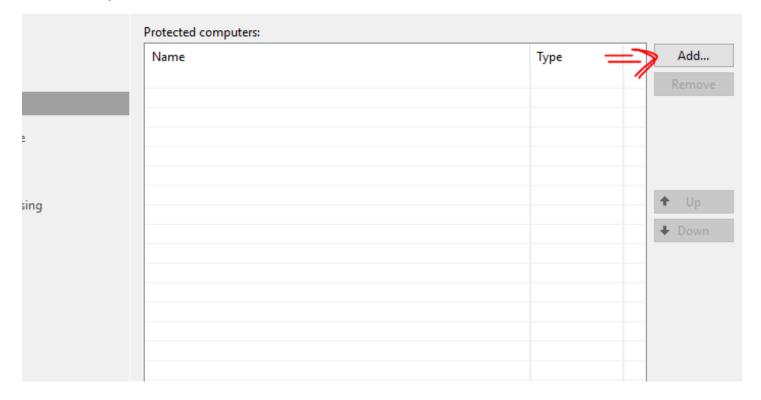
Job Mode	Name:
Name	AD
Computers  Backup Mode  Storage	Description:  Sauvegarde de l'active directory
Guest Processing	
Schedule	
Summary	
	☐ High priority  Backup infrastructure resources are offered to high priority jobs first. Use this option for jobs sensitive to
	the start time, or jobs with strict RPO requirements.
	< Previous Next > Finish Cancel

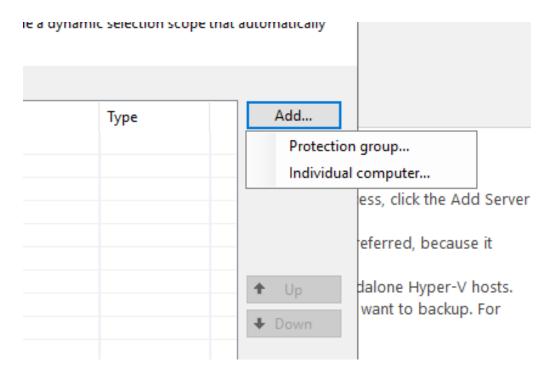
## 1. cliquer sur Add

скир лов

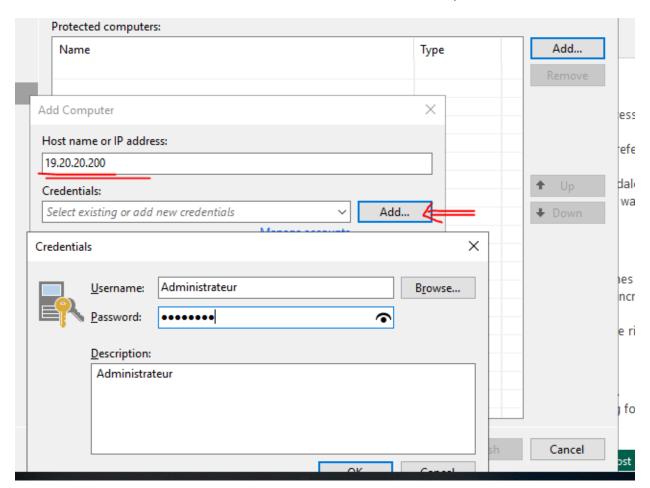
#### mputers

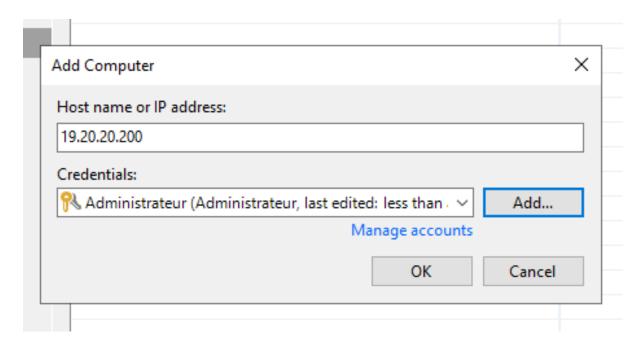
lect protection groups or individual machines to back up. Protection groups provide a dynamic selection scope that automatically dates the list of protected machines as new ones are discovered.





- 1. Mettre l'adresse IP du serveur AD qu'on souhaite remonter
- 2. Ensuite entrer les identifiants de votre serveur et son mot de passe



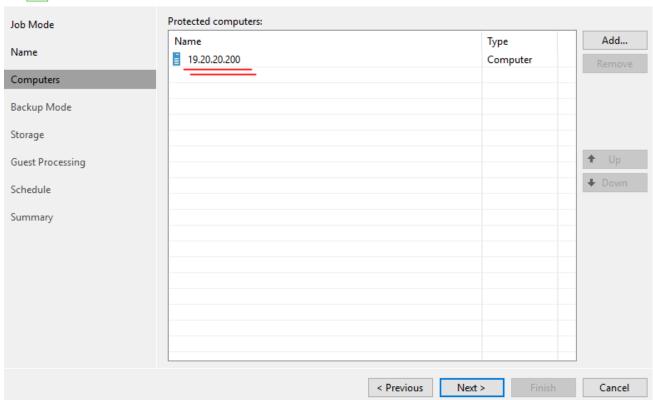




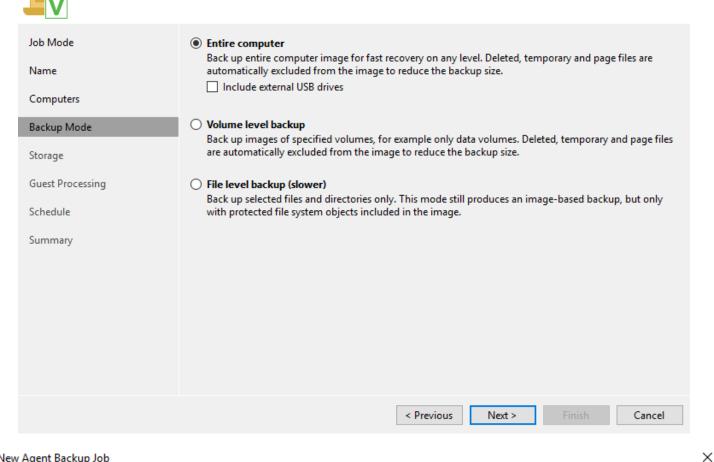
#### Computers

Select protection groups or individual machines to back up. Protection groups provide a dynamic selection scope that automatically updates the list of protected machines as new ones are discovered.

×



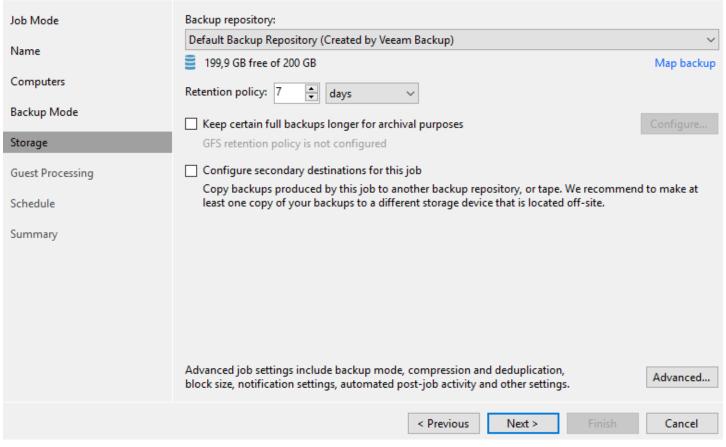






#### Storage

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



New Agent Backup Job



### **Guest Processing**

Choose application processing options.

Job Mode	✓ Enable application-aware processing	
Name	Detects and prepares applications for consistent backup, performs transaction logs processing, and configures the OS to perform required application restore steps upon first boot.	
Computers	Customize application handling options for individual machines and applications Applications	
Backup Mode	Enable guest file system indexing and malware detection Indexing enables global file search functionality, automatic detection of suspicious file system activity and known malware files.	
Storage	Customize advanced guest file system indexing options for individual machines Indexing	
Guest Processing		
Schedule		
Summary		



#### Schedule

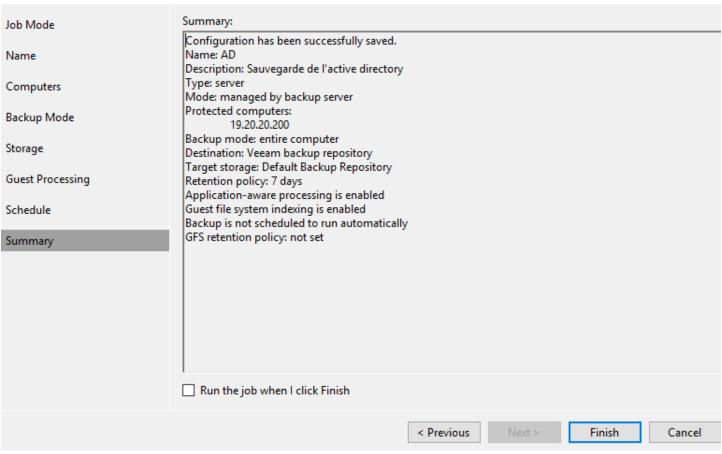
Specify the scheduling options. If you do not set the schedule, the job will need to be controlled manually.

ob Mode	Run the job automatically	
lame	Daily at this time:  22:00 Everyday	Days
Computers	<ul> <li>○ Monthly at this time:</li> <li>○ Periodically every:</li> <li>1</li> <li>✓ Hours</li> </ul>	Months Schedule
ackup Mode	O After this job:	~
torage	Automatic retry —	
iuest Processing	✓ Retry failed items processing: 3 times  Wait before each retry attempt for: 10 minutes	
chedule	Backup window	
ummary	Terminate job outside of the backup window Prevent long-running or accidentally started job from impacting your production infrastructure during the busy hours.	Window
	< Previous Apply Finish	Cancel

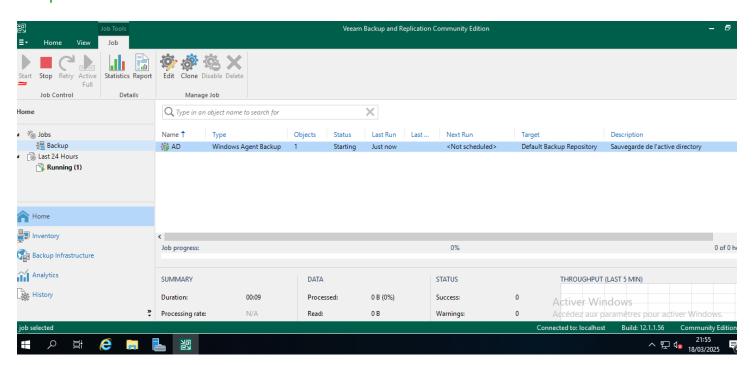
#### Summary

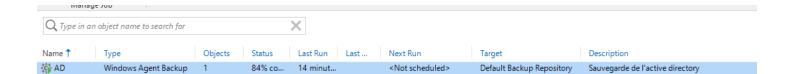


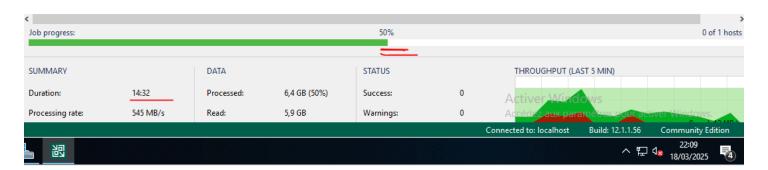
The job's settings have been saved successfully. Click Finish to exit the wizard.



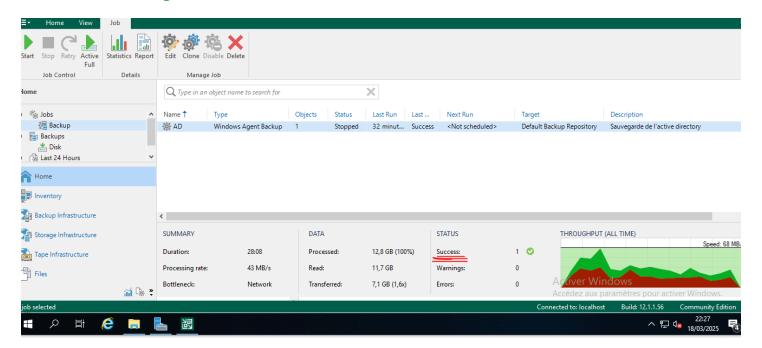
- 1. Pour lancer la sauvegarde il faut appuyer sur le bouton start tout en haut à droit
- 2. Le backup est maintenant en cours
- 3. pour le voir avec dans Home



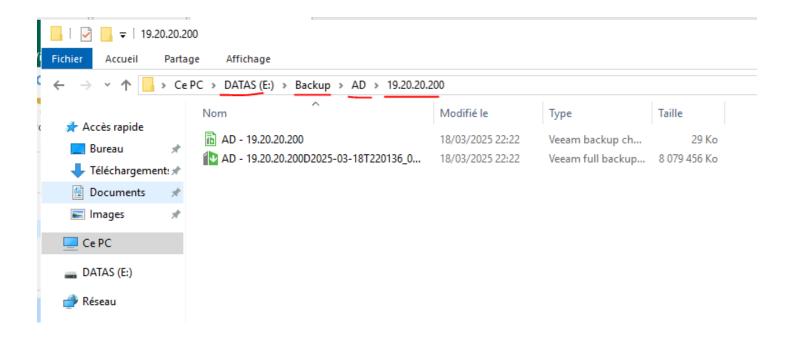




1. Fin de téléchargement

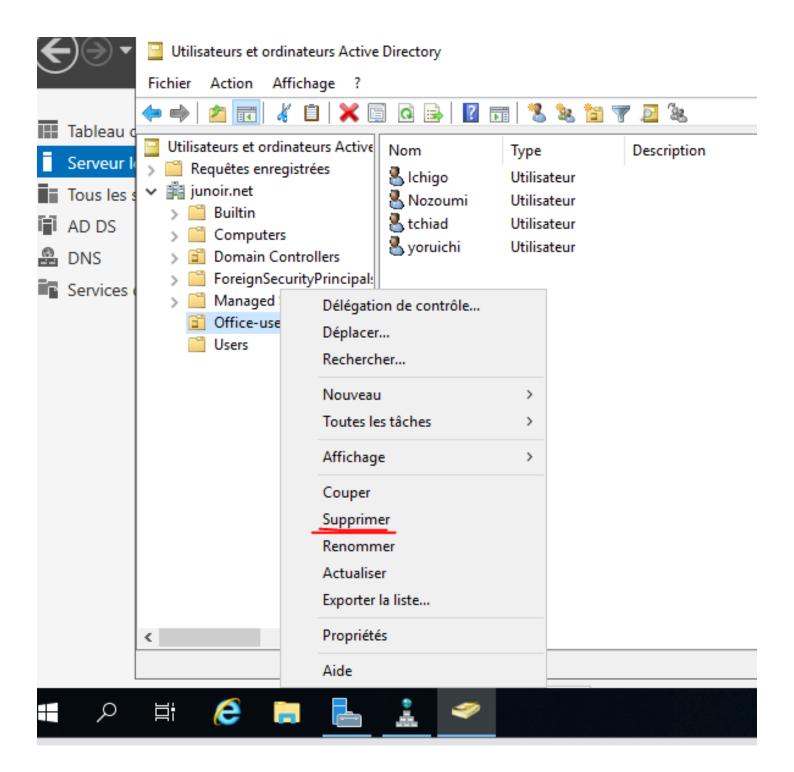


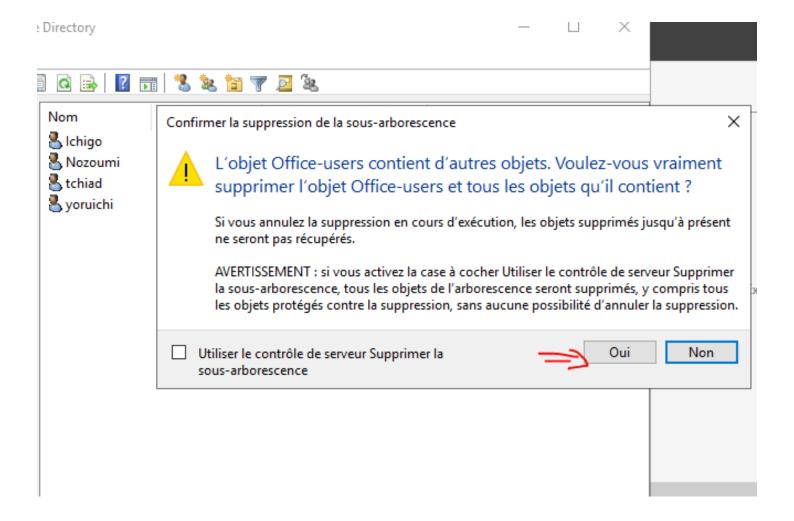
- 1. vérifier votre backup depuis les fichiers
- 2. Aller dans le disque dur DATAS / dossier Backup / dossier AD / dossier avec IP du serveur



# Etape4: Simulation d'une erreur ou d'une suppression des utilisateurs depuis le serveur AD

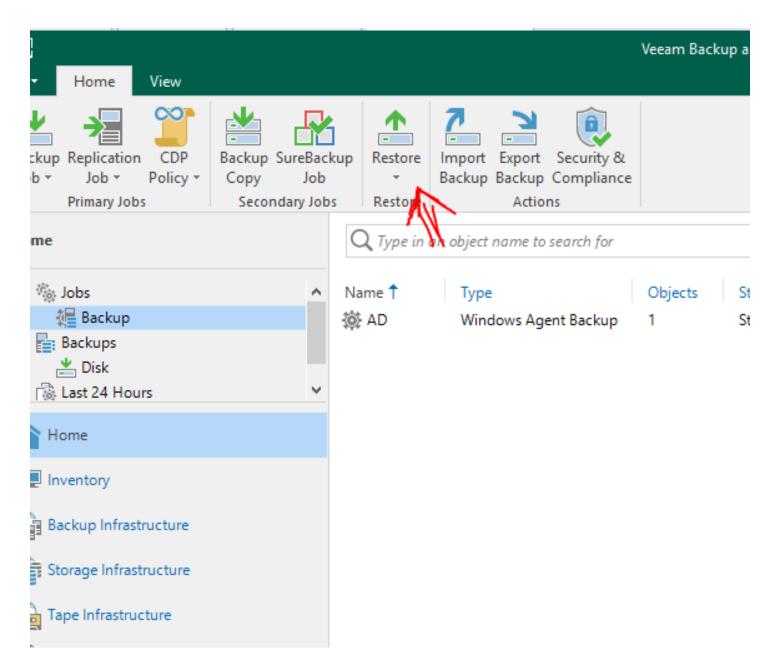
1. On va supprimer l'OU Office-user qui contient vos utilisateurs du domaine





# <u>Etape5: Restauration des utilisateurs</u> <u>supprimer depuis le serveur AD</u>

1. Cliquer sur restore



1. Cliquer sur Application items restore

# Restore from Veeam Agent backup

Select the type of restore you want to perform.



# Entire machine restore

Restores backup as a virtual or cloud machine.



# Disk restore

Restores the content of individual disks and volumes.



# Guest files restore

Restores individual guest files from an image-level backup.



# Application items restore



Restores individual application items from an image-level backup.



### Database restore

Restores databases to a point in time back to the original or to a different server.

1. Cliquer sur Microsoft Active Directory



# Application Items Restore

Choose the application which items you want to restore.



# Microsoft Active Directory



Restore users, groups and computer accounts (or individual attributes), Group Policy Objects, integrated DNS records and configuration partition objects to the production Active Directory.



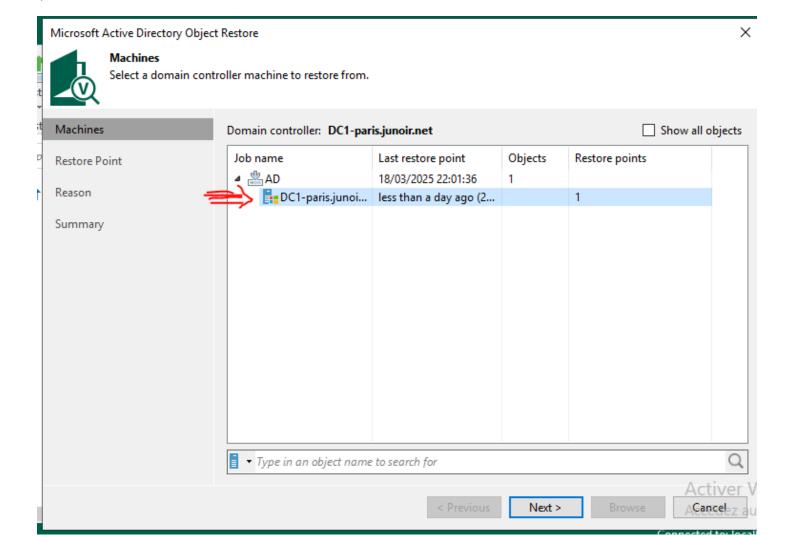
## Microsoft Exchange

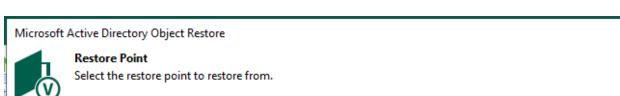
Find and restore individual mailbox items such as emails, appointments or contacts to the production mailbox, or locally to a MSG or PST file.

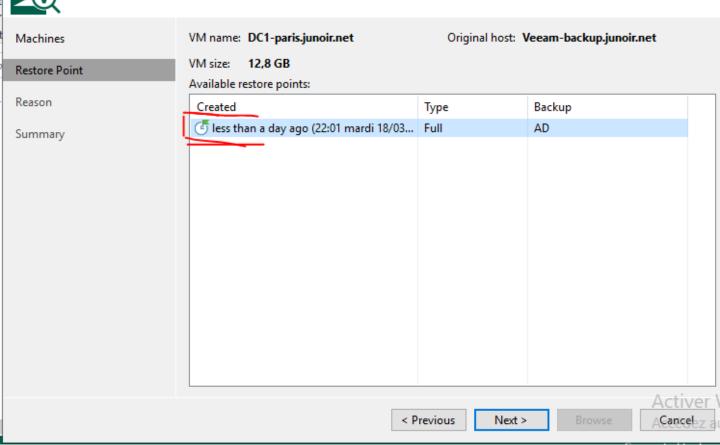


#### Microsoft SharePoint

Find and restore individual documents, libraries and entire sites from a backup of the VM hosting SharePoint content database (SQL Server database files or blob storage).







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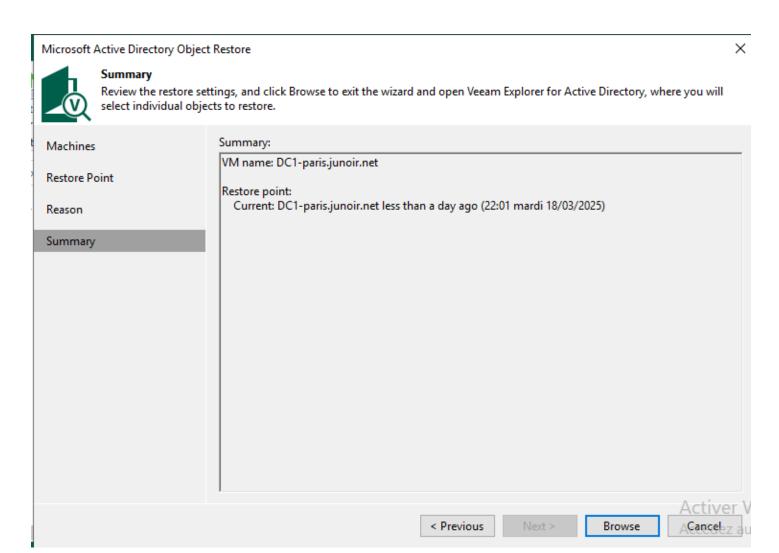
# Microsoft Active Directory Object Restore

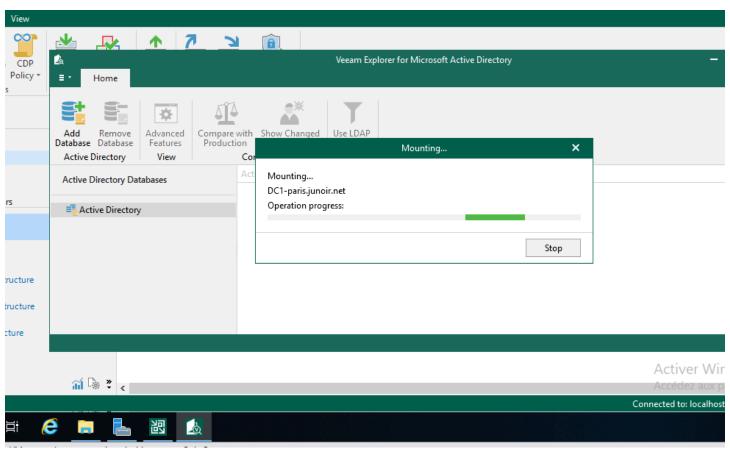


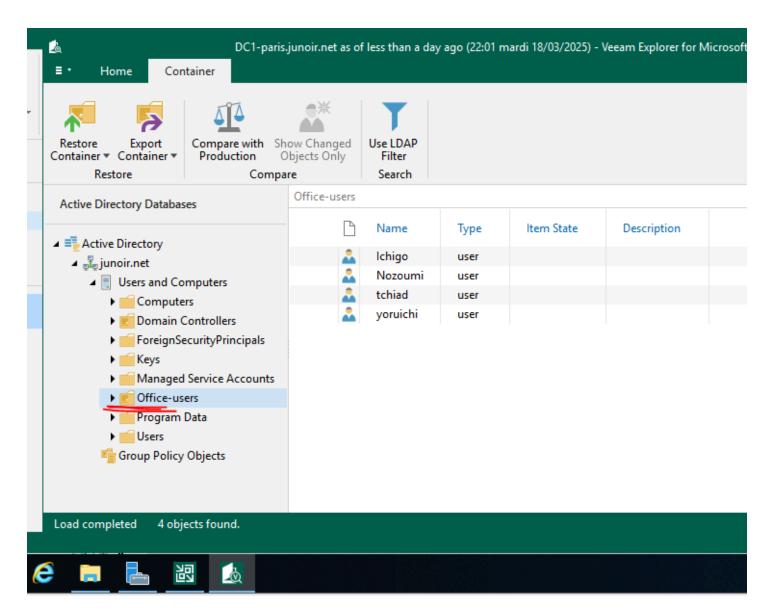
#### Reason

Provide the restore reason for the future reference.

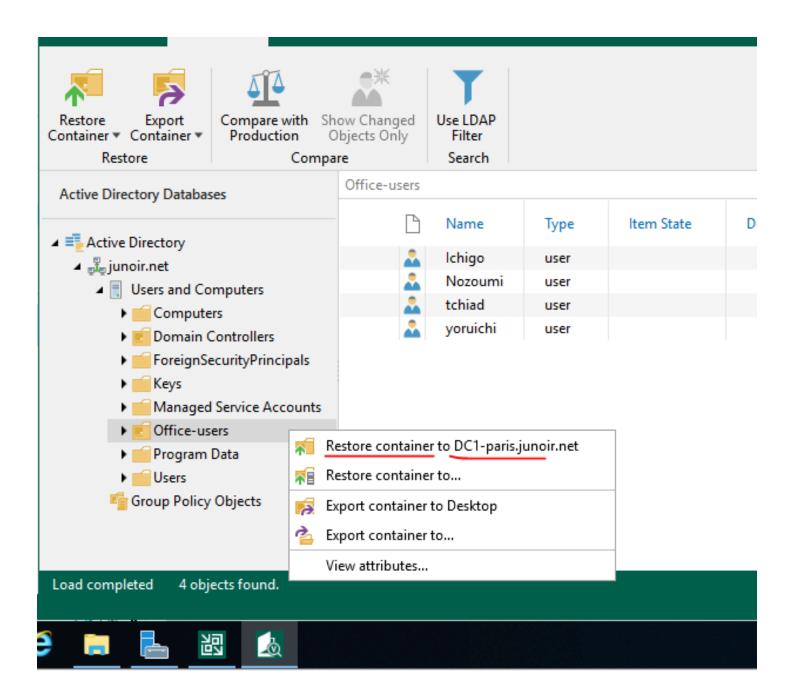
Machines	Restore reason:
Restore Point	restauration objet Active Directory
Reason	
Summary	☐ Do not show me this page again
	< Previous Next > Browse ACtiv



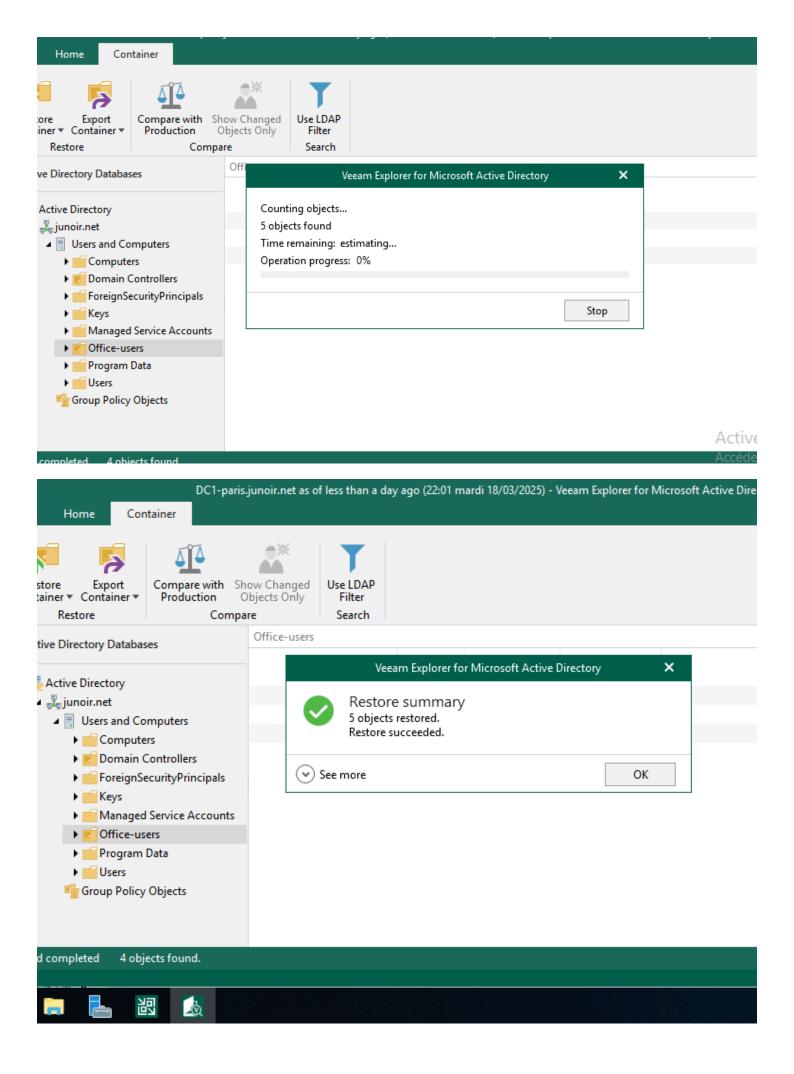




1. clic droit sur Office-user puis restore container to DC1-paris.junoir.net



1. restauration en cour



# <u>Etape6: Restaurations des utilisateurs</u> <u>depuis le serveur AD</u>

