

# Installation VEEAM Backup & Replication

# WINDOWS SERVER

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INTRODUCTION INSTALLATION : Une fois la machine virtuelle prête on lance l'iso de Veeam. On sélectionne ensuite Install Veeam Backup & Replication



View Documentation

실회 문화 Veeam Backup & Replication	-	×
License Provide license file for Veeam Backup & Replication.		
License file:		
	Brow	vse
Update license automatically (enables usage reporting)		
Download and install new license automatically when you renew or expand your contract. Thi sending the license ID, the installation ID, and workload usage counters to Veeam servers per Successful usage reporting doubles the number of workloads you can exceed your installed li If you don't have a license simply click Next to install the Community Edition.	is requires iodically. icense by.	
Veeam EULA prohibits using Community Edition to provide any services to third parties. In you may not install, configure or manage such backup servers at your client's environment consultant or an MSP.	particular, as a	
Back Next	Cance	21

원리 만과 Veeam Backup & Replication		_	×
Ready to Install	ollowing settings.		
Installation folder: vPower cache folder: Guest catalog folder: Service account: Database engine: SQL server: Database name: Catalog service port: Service port: Secure connections port: REST API service port: Check for product updates:	C:\Program Files\Veeam\Backup and Replication C:\ProgramData\Veeam\Backup\IRCache C:\VBRCatalog LOCAL SYSTEM PostgreSQL SRV-V-VEEAM:5432 VeeamBackup 9393 9392 9401 9419 Automatically		
🍄 Customize Settings	Back	Canc	el

Une fois que l'installation est prête on peut cliquer sur « Install ». Lorsque tout est installé on peut lancer VEEAM. L'application va utiliser les identifiants Administrateur du serveur virtuel ou physique sur lequel vous êtes.

		×		
Veeam Backup & Re	plication 12	port number,		
localhost V 9392				
SRV-V-VEEAM\Administrateur				
Password				
✓ Use Windows session authentication				
Save shortcut	Connect	Close		

Une fois lancé, VEEAM va mettre à jour les composants pour « s'adapter » à votre machine

A	Componer	nts Update	×
ic		Servers Select servers to update product's components on. Consider removing servers which are currently down or unreachable from selection. Update process will not reboot the updated server.	n
	Servers	Managed servers:	
1		Server Update required Details	
1	Update	SRV-V-VEEAM Mount Server Refresh	
			h
_		Select All	· · ·
			F
			e
		< Previous Apply Finish Cancel	

Se diriger dans l'onglet latéral nommé « Backup Infrastructure » (en bas à gauche). Une fois dans cet onglet il y a un autre onglet nommé « Backup repositories » c'est ici qu'on va déposer les données qu'on va sauvegarder. En haut à gauche il faut cliquer sur « Add repository ». Cette fenêtre apparaît ensuite :

	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.		
t	<b>_</b>	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.		
		Cancel		

Dans notre cas on enregistre sur un NAS (Network Attached Storage), il faut donc sélectionner la deuxième option.

Ensuite on sélectionne « SMB share ».

E	Network Attached Storage Select the type of a shared folder you want to use as a backup repository.
	NFS share Adds an NFS share. This is the recommended configuration for leveraging storage capacity provided by NAS devices.
	SMB share Adds an SMB (CIFS) share. For reliability reasons, this configuration is recommended for continuously available (CA) network shares only.
	Cancel

Ensuite on nomme notre Repository (dépôt) :

New Backup Repository		×
Name Type in a name and o	description for this backup repository.	
Name	Name:	
Share	SRV-V-VEEAM Description:	
Repository	Created by SRV-V-VEEAM\Administrateur at 05/12/2023 08:45.	
Mount Server		
Review		Js
Apply		
Summary		
	< Previous Next > Finish Cance	el

On doit maintenant indiquer le chemin UNC de notre dossier dans lequel on veut enregistrer notre sauvegarde (ici sur notre NAS donc on précise l'IP du NAS). On coche la case qui permet de se connecter avec des identifiants précis, ici en l'occurrence les identifiants du NAS.

New Backup Repository			×
Share Type in UNC path to write data to this sha	share (mapped drives are not supported), specify share access credentials and how backup re.	jobs should	V
Name	Shared folder: \\172.16.16.64\utils\sio Matteo\Sauvegarde Use \\server\folder format	Browse	
Repository	This share requires access credentials:  So (sio, last edited: less than a day ago)	Add	
Review	Manage accounts Gateway server:		
Apply	Automatic selection	Choose	
Summary			
	< Previous Next > Finish	Cancel	2

Ensuite on peut faire Next, on peut ici limiter le nombre de tâches :

	New Backup Repository		×	:
7)	Repository Type in path to the fo	older where backup files should be stored, and set repository load control options.		
=	Name	Location		a
ef		Path to folder:		
	Share	\\172.16.16.64\utils\sio\Matteo\Sauvegarde		
	Repository	Capacity: 889,8 GB	Populate	
1		Free space: 510,2 GB		
	Mount Server	Load control		
	Review	Running too many concurrent tasks against the repository may reduce overall perfor cause I/O timeouts. Control storage device saturation with the following settings:	mance, and	
	Apply	☑ Limit maximum concurrent tasks to: 4		
	Summary	Limit read and write data rate to:		
		Click Advanced to customize repository settings.	Advanced	
		< Previous Next > Finish	Cancel	
- L				

New Backup Repos	itory	×		
Mount Server Specify a server to mount backups to when performing advanced restores (file, application item and instant VM reco Instant recoveries require a write cache folder to store changed disk blocks in.				
Name	Mount server:			
	SRV-V-VEEAM (Backup server) V Add New			
Share	Instant recovery write cache folder:			
Repository	C:\ProgramData\Veeam\Backup\IRCache\ Browse			
Mount Server	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.	1		
Review	Enable vPower NFS service on the mount server (recommended)			
Apply	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.			
Summary				
	< Previous Next > Finish Cancel			

Une fois la review faite on peut faire next pour appliquer le new backup repository :

	New Backup Repository			×
Ту	Apply Please wait while back	cup repository is created and saved in configuration, this may take a few minute	25.	
2	Name	Message	Duration	
	Share	Starting infrastructure item update process	0:00:23	
1	Share	[SRV-V-VEEAM] Discovering installed packages	0:00:01	
	Repository	[SRV-V-VEEAM] Registering client SRV-V-VEEAM for package Transport		
		[SRV-V-VEEAM] Registering client SRV-V-VEEAM for package vPower		
	Mount Server	[SRV-V-VEEAM] Registering client SRV-V-VEEAM for package Mount S		
	Paviau	[SRV-V-VEEAM] Discovering installed packages		
	Review	All required packages have been successfully installed		
	Apply	Otecting server configuration		
		Reconfiguring vPower NFS service		
	Summary	Creating configuration database records for installed packages		
		Collecting backup repository info		
		Creating database records for repository	0:00:03	
		Backup repository has been saved successfully		
		< Previous Next >	Finish	Cancel

### Ici on peut faire Yes



Maintenant on va ajouter la source de sauvegarde (les machines qu'on veut sauvegarder) :

Il faut aller dans l'onglet « manage servers »

On sélectionne Microsoft Hyper-v :

Add Server Select the type of a server you want to add to your backup infrastructure. All already registered servers can be found under the Managed Servers node on the Backup Infrastructure tab.			
vm	VMware vSphere Adds VMware private cloud infrastructure servers to the inventory.	2	
	Microsoft Hyper-V Adds Microsoft private cloud infrastructure servers to the inventory.	r	
	Microsoft Windows Adds a Microsoft Windows server to the inventory.	i	
<u>\</u>	Linux Adds a Linux server to the inventory.		
	Cancel		

Ici on sélectionne Hyper-V :



Ici on donne le nom de notre Gestionnaire Hyper-V :

	New Hyper-V Server	:	×	
r Q	Name Specify DNS name o	or IP address of Microsoft Hyper-V server.		
e	Name	DNS name or IP address:		ľ
0	-	SRV-HV-IR2		ł
d	Туре	Description:		
	Credentials	Created by SRV-V-VEEAM\Administrateur at 05/12/2023 09:23.		
	Review			
	Apply			
	Summary			
		< Previous Next > Finish Cancel		

Ici on sélectionne la troisième option car on n'a qu'un seul gestionnaire Hyper-V :



Comme l'hyperviseur est hors domaine on doit spécifier les identifiants domaine du serveur sur lequel le serveur Hyper-V est :

New Hyper-V Server	×
Credentials Specify server creden	ntials.
' Name Tvpe	Select an account with local administrator privileges on the server you are adding. Use DOMAIN\USER format for domain accounts, or HOST\USER for local accounts. Credentials:
c	🔧 SRV-HV-IR2\Administrateur (SRV-HV-IR2\Administrateur, last edited: less 👻 🛛 Add
Credentials	Manage accounts
Review	
Apply	
Summary	
	Click Ports to customize network ports to be used by individual components.
	< Previous Next > Finish Cancel

Ici on a la review, on peut faire apply :

	New Hyper-V Server	>	×
r	Review Please review your se	ettings and click Apply to continue.	-
) (e	Name	Due to these modifications the following components will be installed or removed on the target host:           Component name         Status	]
,	туре	Transport already exists	
Ì	Credentials	Hyper-V Integration already exists	
	Review Apply Summary	This Hyper-V server will act as the backup proxy for jobs running in the on-host backup mode.          Task limit:         4 $\checkmark$ After you click Apply missed components will be installed on the target host.	
		< Previous Apply Finish Cancel	]

Une fois cela fait on peut cliquer sur next :

New Hyper-V Server			×
e Apply The following serve	rs have been processed.		
Name	Message	Duration	
Туре	<ul> <li>Starting infrastructure item update process</li> <li>Detecting operating system</li> </ul>	0:00:23	
Credentials	<ul> <li>Collecting hardware info</li> </ul>		
Review	Registering client SRV-V-VEEAM for package Transport		
Apply	<ul> <li>Registering client SKV-V-VEEAM for package Hyper-V Integra</li> <li>Discovering installed packages</li> </ul>		
Summary	<ul> <li>All required packages have been successfully installed</li> <li>Detecting OS version</li> <li>Creating configuration database records</li> </ul>		
	<ul> <li>Collecting disks and volumes info</li> <li>Server has been saved successfully</li> </ul>	0:00:13	
	< Previous Next >	<b>Finish</b> Cancel	

Maintenant on va ajouter un serveur Windows à sauvegarder :

	Add Select th found u	Server × he type of a server you want to add to your backup infrastructure. All already registered servers can be inder the Managed Servers node on the Backup Infrastructure tab.
26	vm	VMware vSphere Adds VMware private cloud infrastructure servers to the inventory.
-+ -V		Microsoft Hyper-V Adds Microsoft private cloud infrastructure servers to the inventory.
		Microsoft Windows Adds a Microsoft Windows server to the inventory.
		Linux Adds a Linux server to the inventory.
		Cancel

Une fois le nom de votre serveur indiqué on peut faire suivant, arrivé sur cette fenêtre il faudra utiliser les identifiants domaine de votre serveur Windows (ici ENG\Administrateur et le mot de passe administrateur) :

New Windows Server	×
Credentials Specify server credentials	ntials.
Name Credentials	Select an account with local administrator privileges on the server you are adding. Use DOMAIN\USER format for domain accounts, or HOST\USER for local accounts. Credentials:
Review	Region         Region         Add         Add           Manage accounts         Manage accounts         Manage accounts
Apply	
Summary	
	Click Ports to customize network ports to be used by individual components. Ports
	< Previous Next > Finish Cancel

Une fois terminé on peut cliquer sur Finish :

New Windows Server			×
Apply Please wait while req	uired operations are being performed. This may take a few minutes		
Name	Message	Duration	
Credentials	Package VeeamGuestAgent_x86.msi has been uploaded		^
creating by	📀 Package VeeamGuestAgent_x64.msi has been uploaded		
Review	Package VeeamLogBackupService_x86.msi has been uploaded		
Apply	Package VeeamLogBackupService_x64.msi has been uploaded		
עיליס	😒 Installing package Transport	0:00:53	
Summary	Oeleting temporary folder		
	Registering client SRV-V-VEEAM for package Transport		
	Oiscovering installed packages		
	All required packages have been successfully installed		
	Creating database records for server		
	Oetecting server configuration		
	Creating configuration database records for installed packages		
	Collecting disks and volumes info	0:00:03	
	Microsoft Windows server saved successfully		
			$\sim$
	< Previous Next >	Finish Can	cel

On a bien notre Gestionnaire Hyper-V, notre AD1 et notre serveur VEEAM :

 Name T
 lype

 SRV-HV-IR2
 Microsoft Hyper-V server

 SRV-V-AD1
 Microsoft Windows server

 SRV-V-VEEAM
 Microsoft Windows server

### Description

Created by SRV-V-VEEAM\Administrateur at 05/12... Created by SRV-V-VEEAM\Administrateur at 05/12... Backup server

Maintenant on va créer une tâche de sauvegarde pour l'Hyperviseur :

Dans Home  $\rightarrow$  Job  $\rightarrow$  Nouveau Job :

New Backup Job	×
Name Type in a name	and description for this backup job.
Name	Name:
V	Sauvegarde_VM
Virtual Machines	Description:
Storage	Created by SRV-V-VEEAM\Administrateur at 05/12/2023 10:55.
Guest Processing	
Schedule	
Summary	
	<ul> <li>High priority</li> <li>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.</li> </ul>
	< Previous Next > Finish Cancel

Une fois notre job nommé on peut faire Next, ensuite on peut faire Add et on voir notre Gestionnaire Hyper-V avec les machines dedans comme ceci :

On va sélectionner les machines qu'on veut sauvegarder :

	Add Objects	×
ne 1a	Select objects:	N 📴 🖶 🍓 📬
1.	AIS-SPLUNK-PL AIS-SRV-V-AD1-PL AIS-SRV-V-AD2-PL AIS-SRV-V-DEBIAN-GLPI-PL AIS-SRV-V-DEBIAN-SYSLOG-PL AIS-SRV-V-FS1-PL AIS-SRV-V-FS2-PL AIS-SRV-V-FS2-PL AIS-SRV-V-PFSENSE1-PL AIS-SRV-V-PFSENSE2-PL AIS-SRV-V-RDS-PL AIS-SRV-V-VEAM-PL AIS-SRV-V-VEAM-PL SIO2-CLI-V-W10-ENG SIO2-SRV-V-AD1-ENG SIO2-SRV-V-EAM-ENG SIO2-SRV-V-FS1-ENG	*
	★ Type in an object name to search for	Q
		Add Cancel

Une fois les machines sélectionnées on peut changer l'ordre de sauvegarde avec UP and DOWN :

New Backup Job				×
Virtual Machines Select virtual machin changes as you add	es to process via container, or granula new VMs into the container.	arly. Container provides dyr	namic selection that	automatically
Name	Virtual machines to backup:			
	Name	Туре	Size	Add
Virtual Machines	SIO2-SRV-V-AD1-ENG	Virtual machine	17,2 GB	Remove
Storage	SIO2-SRV-V-AD2-ENG	Virtual machine	17,4 GB	
	SIO2-SRV-VEEAM-ENG	Virtual machine	24,9 GB	Exclusions
Guest Processing	SIO2-SRV-V-FS1-ENG	Virtual machine	10,1 GB	
Schedule				t Up
Summary				➡ Down
				Recalculate Total size: <b>69,8 GB</b>
		< Previous Ne	ext > Finish	Cancel

Ici on nous demande la destination de sauvegarde, on peut sélectionner notre serveur VEEAM, on peut choisir la rétention des sauvegardes :

New Backup Job		×
Storage Specify processing p this job and customi	roxy server to be used for source data retrieval, backup repository to store the backup file ze advanced job settings if required.	es produced by
Name	Backup proxy:	
	Off-host backup (automatic proxy selection)	Choose
Virtual Machines	Backup repository:	
Storage	SRV-V-VEEAM (Created by SRV-V-VEEAM\Administrateur at 05/12/2023 08:59.)	~
Guest Processing	510 GB free of 889 GB	Map backup
Schedule	Retention policy: 7 🗘 days 🗸 🌗	
Summary	<ul> <li>Keep certain full backups longer for archival purposes</li> <li>1 weekly</li> </ul>	Configure
	Configure secondary destinations for this job	
	Copy backups produced by this job to another backup repository, or tape. We reco at least one copy of your backups to a different storage device that is located off-si	mmend to make ite.
	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

Dans advanced on a beaucoup d'options à paramétrer :

4	dvanced Settings							×
	Backup Maintenance	Storage	Notifications	Hyper-V	Scripts			
	Backup mode							-
	Reverse increation Increments are file is always a	mental (slo e injected i full backu	ower) nto the full bac o of the most re	kup file, so ecent VM s	that the l tate.	atest b	ackup	
	Incremental ( Increments are chain. Best for Create syn samedi Cc	recomment e saved into backup tao thetic full b onfigure	nded) o new files depo rgets with poor packups periodi	endent on random I/ cally on:	previous O perform	files in t nance.	the	-
	Active full backup							-
	samedi Confi <u>c</u>	jure						

Ici on peut cocher l'option pour vérifier l'état de santé de nos fichiers de sauvegardes :

	Advanced	Settings						×
	Backup	Maintenance	Storage	Notifications	Hyper-V	Scripts		
rc n	Storage	e-level corruptio Perform backup At 22:00 on Las ckup file mainter	n guard files heal t Friday of nance	th check (detec	ts and aut Configure	o-heals con	ruption) on:	]
		Remove deleted Defragment and Last Saturday o	d items da d compact f every mo	ta after t full backup file onth Configure	e on:	1	4 🗘 day	s
1	Save As	Default				OK	Cancel	

Ici on va cocher les deux options qui sont importantes (la première :VEEAM peut appliquer les tâches propre au système sur lequel on sauvegarde, la deuxième : on peut restaurer un seul fichier dans la machine à la place de restaurer toute la machine) :

Ensuite on va mettre les identifiants du domaine car toutes les machines sont dans le domaine :

	New Backup Job		<							
f f	Guest Processing Choose guest OS processing options available for running VMs.									
	Name Virtual Machines Storage Guest Processing Schedule	<ul> <li>Enable application-aware processing         Detects and prepares applications for consistent backup, performs transaction logs processing, and configures the OS to perform required application restore steps upon first boot.         Customize application handling options for individual machines and applications         Applications     </li> <li>Enable guest file system indexing         Creates catalog of guest files to enable browsing, searching and 1-click restores of individual files. Indexing is optional, and is not required to perform instant file level recoveries.         Customize advanced guest file system indexing options for individual machines         Indexing     </li> </ul>	]							
	Summary	💦 ENG\Administrateur (ENG\Administrateur, last edited: less than a day ago) 🗸 Add								
		Manage accounts Customize guest OS credentials for individual machines and operating systems Credentials								
		Verify network connectivity and credentials for each machine included in the job Test Now								
		< Previous Next > Finish Cancel	]							

Specify the job	o scheduling options. If you do not se	t the schee	dule, t	he job will need t	to be controlled r	manually.						
Name	<ul> <li>Run the job automatically</li> </ul>	,										
Vintural Manahiman	Oaily at this time:	21:00 🗘 Everyday 🗸				~	Days					
virtual Machines	O Monthly at this time:	22:00	~	Fourth 🗸	Saturday	~	Months					
Storage	O Periodically every:	1	~	Hours		~	Schedule					
Guest Processing	<ul> <li>After this job:</li> </ul>	O After this job:										
Schedule Automatic retry												
Summary	Retry failed items pro	cessing:	1	times	_							
	5											
	Backup window	Backup window										
Long running or accidentally started jobs will be terminated to prevent impact on your production infrastructure during busy hours.												

# Une fois la tâche faite on peut tester le job :

## Le job fonctionne correctement

Q. Type in an object name to search for			X T All jobs						
Name Sauvegarde_VM	Type Hyper-V Backup	Objects 4	Status 1 Stopped	Last Run 24 minutes ago	Last Result Success	Next Run 05/12/2023 21:00	Target SRV-V-VEEAM	Description Created by SRV-V-VEEAM\Administrateur at 05/12/2023	
SUMMARY		DATA		STATUS		THROUGHPUT (ALL T	IME)		
Duration:	14:49	Processed:	69,9 GB (100%)	Success:	4 💙				Speed: 175 MB/s
Processing rate:	110 MB/s	Read:	64,3 GB	Warnings:	0				
Bottleneck:	Target	Transferred:	41,5 GB (1,5x)	Errors:	0				
Name	Status	Action							Duration
SIO2-SRV-V-AD1-ENG SIO2-SRV-VEEAM-ENG SIO2-SRV-V-AD2-ENG SIO2-SRV-V-FS1-ENG	<ul> <li>Success</li> <li>Success</li> <li>Success</li> <li>Success</li> </ul>	<ul> <li>Job started at 05</li> <li>Building list of m</li> <li>VM size: 213 GB</li> <li>Changed block t</li> </ul>	/12/2023 11:24:48 achines to process (69,9 GB used) racking is enabled						00:05
	Ť	Processing SIO2	SRV-V-AD1-ENG						12:24
		Processing SIO2- Processing SIO2-	SRV-V-AD2-ENG SRV-VEEAM-ENG						10:07
		Processing SIO2	SRV-V-FS1-ENG						10:39

Voici la procédure pour installer et configurer VEEAM Backup et Replication.

Vous devrez adapter cette installation et configuration à votre infrastructure.

STCHERBININE Mattéo SIO2