

SB Connectivity Veeam - S3 Capacity Tier

This manual shows the instruction for connecting the Silent Brick System with Veeam as a S3 Object Store

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INTRODUCTION

This manual shows the instruction for connecting the Silent Brick System with Veeam as a S3 Object Store under a Scale-Out backup repository.

This guide is tested with Veeam 11 and the Silent Brick System Version 2.39

Step 1 — General Information



(i) Installation and Connectors

Installation and electrical connection as well as network connection are to be done as described in the manual Installation

(i) Network Adjustments The network settings are to be adjusted as described in the manual Installation

Step 2 — SNAS - Volume Setup

Welcome Welcome Resources Controllers Shelves	
IIII Bricks	
Libraries	
Volumes	
Archives	S3CapacityTier
Settings	
- Network	
Connections	
Lusers	
Notifications	
* Miscellaneous	SNAS Y Encrypt Volume
SWE SMB	Triple Parity Vise compression Case Sensitive Optimize for Large Files
SNMP	
🗙 Services	Cancel
👻 🕕 System Status	
Overview	
📞 Support Area	
Statistics	
() History	

The settings of this volume differ from settings for a Backup to disk repository which uses Large File Optimization and probably no Audit.

- Create a new Volume of type 'SNAS' with a parity of 3 or 2
 - Compression is recommended for the capacity tier
 - Disable Large File Optimization
 - (i) For higher redundancy a parity level of 3 is recommended

Step 3 — SNAS - S3 Share setup

General Shares Snaphots Bricks Statistics	General Shares Snapsl	nots Bricks Statistics	Name 2 Add 54'S Stare 2 Add 53 Stare 2 Annove 2 Context Herru Type Name Coptions NYS Path NYS Path Type CoactyTher brownedie
Volume/Path ~ Type name Options	💽 Add SMB Share 💽 Add NFS	Share 🚹 Add S3 Share 间 Remo	
	Volume/Path 🔺	Type Name	Manange S3 Buckets S
	VeeamRepository/CapacityTier	S3 CapacityTier Manage Buckets	pucket name File Count
Add S3 Share		Edit	
Please enter name and configuration for this share. Share Name: CapacityTier			Create New Bucket
Access Key: someAcessKey Secret Key:		Remove	Carcol Create
Retype Secret Key:			
Pert: 9000 C S32 Connection Settings Service Pert: https://www.seture.org/actional Access Rev: pervice-actional actional			
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- In your volume navigate to the Shares section
- Choose "Add S3 Share"
- Enter a Share Name
- Enter credentials for accessing the S3 layer
- The Port will be automatically increased for each new S3 instance
- Write down the Access Point URL.
- Right-Click on the S3 Share and choose "Manage Buckets"
- Create a new Bucket for use with Veeam

Step 4 — Optional: Add custom Certificates

Settings	Custom SSL-Certificate:				
 Settings Network Connections Users Notifications Miscellaneous SMB 	Slobal NIC Settings Default Gateway:	SSL-Certificate Custom SSL-Certificate: NIC Global NIC Settings Default Gateway: DNS Server 1 (IDv4/IPv6):	Yes SSL-Certificate Upload certificate files Private Key:	Prese provide at least a private key and a certificate as fille or as test. If you leave all fields empty the SSL-certificate is reseted to system default. Preses select a private key file (*.key)	Browse
 SNMP Services System Status Overview Support Area Statistics History DNS Server 2 (IPv4/IPv6): DNS Server 2 (IPv4/IPv6): DNS Server 2 (IPv4/IPv6):		DNS Server 2 (IPv4/IPv6): management	Private Key: Certificate: CA Certificate:	Please select a certificate file (*.crt) Please select a certificate file (*.crt)	Browse Browse
	TCP/IP(4) Configured by DHCP: IP-94 Address: Subnet Mask: TCP/IP(46) Router: IP-64 Address: In-14: Parameters Bionding Mode: IOLH Events Volume Events C	Upload certificate as lost Private Key: Cartificate: CA Certificate:	Reset Cincel	Size	

- Since S3 communicates via HTTPs, certificates are being used. In order to update the SSL certificate of the Silent Brick System proceed as follows:
 - Navigate to Settings -> Network
 - Select "Edit" for "Custom SSL Certificate" and upload your own certificates.
- (i) Certificates may be generated manually or via services like Lets Encrypt
- Supported certificate types are SSL certificates including the private key and the signing certificate authority.

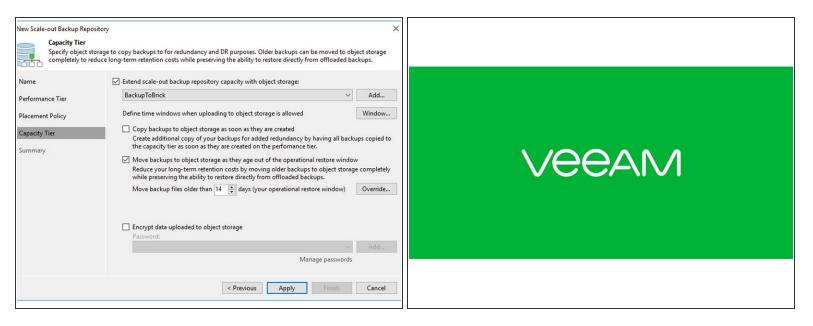
A Certificates with passphrase are not supported.

Step 5 — SNAS - Veeam setup

Object Storage × Select the type of object storage you want to use as a backup repository. ×	AME 4 TYPE HOST PATH Send Status Base Querty Control of the Contro	NS NSS
S3 Compatible Adds an on-premises object a prage system or a cloud object storage provider.	Name Service point: Import Account Import Device Import	New Lot Acout
Amazon S3 6 Addu SJ object storage or an AWS Snowball Edge appliance.	Burket (u-sash) Summary Unservice (U-sash) Summary Unservice (U-sash) Summary Add_ Manage cloud accounts	The is a set limit to help control your velocit analysis grand. The specified in the specific term is a set of the specific term is the
Microsoft Azure Blob Storage Adds Microsoft Azure Blob storage. Both Azure Blob Storage and Azure Data Box are supported.		Auchen seing seine häjest strange sapakillen. Object lännge must kapport 5 facture.
IBM Cloud Object Storage Adds IBM Cloud object storage. S3 compatible versions of both on-premises and IBM Cloud storage offerings are supported.	Use the following gateway server: WW9-2004P-0004PG (Backup server)	- Phone Hert -
	Setect a gateway server to proxy access to the object storage system. If we gateway ensure is specified, all scale-out backup repository extents must have direct network access to the storage system.	
Cancel		There Takes

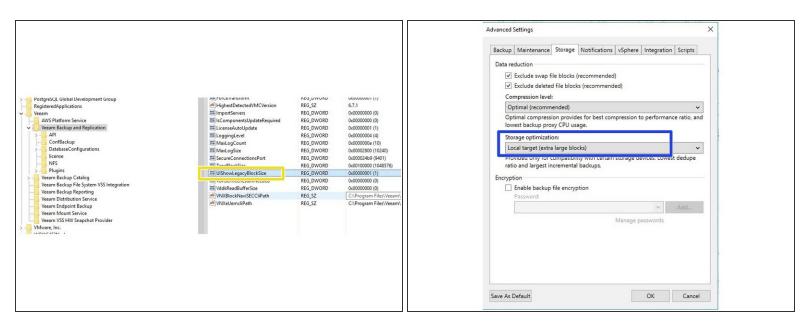
- Add a new repository of type 'Object Storage' 'S3 Compatible'
- Enter the Service Point URL previously noted
- Enter the credentials as defined for the S3 Share
- Select the previously created bucket
- Add a folder to the bucket

Step 6 — Veeam - Add to the Scale-Out Backup repository



- Edit your existing Scale-Out Backup repository and add the new Object Store as capacity tier.
- You Object Store on a Brick is now being used in your Veeam SOBR.
- (i) Retention for data in the capacity tier depends on the Backup Job Retention
- (i) Choose "Copy" to create instant redundancy of your data
- Choose "Move" to free up disk space in the performance tier by moving data to the capacity tier after time.
- (i) Both is combinable
- If you want to archive data in the capacity tier use "Move" in the SOBR and the GFS setting along with a proper retention in your backup job configuration.

Step 7 — Performance tuning - Silent Brick DS



- (i) Per Default VEEAM write quite small objects which can influence the performance especially on spinning disks. Therefor increasing the Object Size can result in a higher Performance.
- Increasing the Object size will result in bigger incremental backups
- To make this option visible, create the UIShowLegacyBlockSize (DWORD, 1) registry value under the 'HKLM\SOFTWARE\Veeam\Veeam Backup and Replication' key on the backup server. Keep in mind that this option significantly increases incremental backups size and requires an active full backup to be activated.
- Modify your Backup Job to use Extra Large Object Sizes
- Run an active full backup

Step 8 — Performance Tuning - Silent Brick FLASH

Advanced Settings × Backup Maintenance Storage Notifications vSphere Integration Scripts Data reduction ✓ Exclude swap file blocks (recommended) ✓ Exclude deleted file blocks (recommended)	 Per Default VEEAM write quite small objects which can influence the performance especially on spinning
Compression level: Optimal (recommended)	disks. Therefor increasing the Object
Optimal compression provides for best compression to performance ratio, and lowest backup proxy CPU usage.	Size can result in a higher
Storage optimization: Local larget (large blocks) Required for procession source machines wit deduce ratio and largets incremental backups.	Performance.
Encryption Encryption Password: Manage passwords	Increasing the Object size will result in bigger incremental backups
	 Modify your Backup Job to use Local Target (Large Blocks)
Save As Default OK Cancel	 Run an active full backup