

QSAN Unified Storage Series Application Note

Snapshot & WORM Integrated with Veeam Backup Data Protection Guide



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April 2021

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This QSAN Unified Storage series application note is applicable to the following XCubeNXT models:

Model Name	Controller Type	Form Factor, Bay Count, and Rack Unit
XN8026D	Dual Controller	SFF 26-disk 2U Chassis
XN8024D	Dual Controller	LFF 24-disk 4U Chassis
XN8016D	Dual Controller	LFF 16-disk 3U Chassis
XN8012D	Dual Controller	LFF 12-disk 3U Chassis

XCubeNXT Storage System Rack Mount Models

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Veeam Data Protection

Executive Summary

Digital transformation era boosts enormous data growth, digital data becomes the essential asset for every organization. Veeam is the leader in Cloud Data Management, providing a simple, flexible and reliable backup & recovery solution for all organizations. QSAN collaborates with Veeam to liberate the traditional backup architecture. Providing the modern data backup and protection solutions to prevent business or organization from cyber-attack.

Audience

This document is applicable for QSAN customers and partners who are interested in learning about how Veeam and QSAN collaborate the data protection solutions for preventing from ransomware or any cyberattack. It assumes the reader is familiar with QSAN products and has general IT experience, including knowledge as a system or network administrator. If there is any question, please refer to the user manuals of products, or contact QSAN support for further assistance.

Overview

With rapid data growth, digital data evolves continuously. More than 70% of companies do not have effective data protection strategies, leaving companies in a dangerous state at all times. However, effective data protection is usually complex and expensive, and the current dated backup technology is difficult to manage and protect the ever-expanding data. The backup solution continues to transform in response to demand. More and more ransomware and cyber-attacks became significant issues of digital transformation.

Most of the business think that data has been backed up multiple times, the current data can still be stored safely while attacking by ransomware, but this is not 100% truth. The ransomware will attack the entire shared folder. When the ransomware is in one of the backup platforms, all the data in the network neighborhood will not be spared. Eventually, it



will fall into the trap of ransomware, and the enterprise will have to spend extra cost to get it decrypted. However, together with Veeam, integrating backup software and storage system, we provide not only easy data backup but the high availability data protection.



The Structure of QSAN and Veeam Integration

Figure 1-a QSAN and Veeam Integration Structure

Create VMs on server and save all the data into QSAN primary storage. Applying Veeam software for backing up to QSAN storage for data integration.

The Integration with Veeam from QSAN through Snapshot Mechanism

<u>Snapshot</u> is the read only file stored in the safe Zettabyte File System (ZFS). No matter your data is attacking by ransomware or the unexpected condition happened in the storage, snapshot file can help to recover all the data. To achieve rapid data protection and recovery short-term data preservation through storage snapshot integration technology. Making sure the unexpected issues do not affect online operating data.

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Figure 2-b How QSAN Snapshot Works for Data Protection

All of the VM data are stored in QSAN primary storage, applying Veeam for backup to

QSAN Unified Storage. Using Restful API to communicate between Veeam and QSAN Unified Storage. The Restful API provided by QSAN is scripted as "automatically take snapshot after Veeam finish backup." Thus, QSAN and Veeam integration makes business data protection automatically done by taking snapshot that ensure snapshot file is kept in ZFS, there's no need to worried about data is been tempered by cyber-attacks.

How to Set Up Auto-Snapshot After Veeam Backup

Step 1. Open Control Panel Step 2. Go to File Sharing \rightarrow Folder \rightarrow Shared Folder Step 3. Click on Create



	C		Control Panel			٩	?
> System		older Map Sha	ared Folder NFS Host	Windows Netwo	k Host Folde	er Link	
> Storage	Create Settings						
File Sharing Image: User Image: Group Image: Domain Security	Folder list	Information Folder name Description Location	Build v1				*
Folder		WORM	None				- 1
> Network Service		2 % O Thresho	Used Available Total size Id notification	57 GB 3.52 TB 3.58 TB	Folders	124 8 Export	_
		Permission Owner Owning group Account	admin Administrator_Group		80%	Warning 50% Search user and group	lb A

Figure 1-1 Configuration Page for folder Setup

Step 4. Select Create a Share Folder \rightarrow Click Next bottom

(Create Folder	
Create a Share	ed Folder	
🔵 Create a Sub F	Folder	
	Cancel	Next
Figure 1-2	Create a Shared	Folder

Step 5. Type in Folder name \rightarrow Click Confirm bottom



	Cre	ate Folder		
Create Folder				
Folder name				
Description				
Location	Software	~		
The folder will share t capacity for the folde	he size of Softwar :	e. You can als	o enable folder	size and reserve
🗌 Folder size (Reser	ved capacity) 0			GB
-0				
Total 5 TB	Used 8		Availabl	e 4.91 TB
Hide Network Driv	e			
🕑 Enable Recycle Bi	n			
Anonymous login	Read only		~	
Enable File Retent	ion 10	Days delete	files. Advan	се
When this feature is e be automatically dele	nabled, if the file h ted.	as not been o	pened within th	e set time, it will
			Canc	el Confirm

Figure 1-3 Type in Folder Name to Create Folder

	C		Control Pane			٩		?
> System		Folder Map	Shared Folder	NFS Host	Windows Network Hos	t Folder Link		
> Storage	Create Settings							
 File Sharing User Group Domain Security Folder Network Service 	Folder list Search folder Build Source Tmp Web test12334 veeam worm	Folder Descrip Locatic WORM	ation name veeam otion on v1 Retention ; 3 % Used 3 % Avail Total size	beriod on this f able	older: - day(s) 107 GB 3.52 TB 3.63 TB Fold	Folders Files ler Structure	2 2 Export	*
		Permis Owner Owning Accour	User has used admin group Adminis U	strator_Group	 Information 80% 	• W	arning 90% Search user and group	

Figure 1-4 Finish Set Up Veeam Folder

Step 6. Please refer to **B. Set Up in Veeam Backup and Replication UI**

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Make the Protection Triple! WORM, Snapshot, and Veeam

<u>WORM</u>, stands for write once read many, is the unique feature designed by QSAN and comes with Unified Storage that doubles the level of data protection. WORM can ensure that the status of the written data will not change, it can neither be deleted nor changed. The WORM mechanism has "locked" the data status, and inherently prevented the possibility of ransomware attacks, encryption or deletion of data.



Figure 2 How QSAN WORM Works for Data Protection

QSAN provides the Restful API to communicate between Veeam and QSAN Unified Storage. User decides the Veeam Backup period, the same period will be applied to WORM Protection.

For Example:

- 1. User creates 2 folders (Named Folder Veeam & Folder WORM for example), and set up Veeam to do data backup EVERYDAY.
- 2. After Veeam finish backing up in day 1, it will take snapshot automatically, and copy the meta data and transaction file saving them in folder WORM.
- 3. Under WORM protection, Data Day 1 in folder WORM cannot be modify for 2 day.



- 4. Veeam will automatically do the second backup after a day (user set up). After Veeam backup, repeating the second and third steps.
- 5. After 2 days, WORM is expired, it will automatically delete Day 1 data in folder WORM (Make Folder WORM always have only two data to save storage capacity).

Benefit of Veeam and QSAN WORM Integration

Single data backup is not enough for preventing ransomware. Veeam and QSAN WORM integration doubles the level of data protection!

- Enable WORM protection mechanism after Veeam automatic backup for an active data protection.
- Make sure the ransomware cannot modify the metadata and transaction files that are kept intact by WORM.
- However, if business is unfortunately being attacked by a ransomware, business can still complete data recovery from a folder protected by WORM.
- The 24-hour WORM expiration setting will delete previous metadata automatically, so that your data is not only perfectly protected, but also not occupying your storage capacity.

How to Set Up Auto-WORM After Veeam Backup

A. Set Up in QSAN UI

Step 1. Open Control Panel

Step 2. Go to File Sharing \rightarrow Folder \rightarrow Folder list

Step 3. Select a **Share Folder** \rightarrow Click on the **Gear icon** \rightarrow Select **WORM** from dropdown menu



	C	c	Control Panel		Q,		?
> System		Folder Map Sha	red Folder NFS Host	Windows Network H	ost Folder Link		
> Storage	Create Settings						
 File Sharing 	Folder list	Information					
👤 User	E	🗱 🗸 📕 Folder name	worm				^
🔍 Group	Q Search folder	Edit					- 1
窿 Domain Security	Build	WORM	Software	lan afabia faldan dalar			- 1
E Folder	Source	Delete	Retention period on the t	nies of this folder: I day(5)		- 1
> Network Service	Web		Used	0.09 MB	Folders	0	- 1
	test12334	0 %	Available	4.92 TB	Files	0	- 1
	veeam	Threshol	d notification	4.92 IB F0	older Structure	Export	- 1
	worm	O miesilo	unouncation				
		Use use	rhas d	Information 80	% = W	/arning 90%	
		Permission					
		Owner	admin	~			
		Owning group	Administrator_Group	×			
		Account	1 a	~	Q	Search user and group	-

Figure 2-1 Configuration for WORM Setup

Step 4. Check Enable WORM protection box to enable WORM→

Click on the Set Retention Period on Each File of This Folder radio button

- 1) Enter a number equal to or greater than 1 Day(s)
- (2) Click on the **Next** button

[Note] Days set up proportion is 1:2 (Veeam backup : WORM)

For example:

- If user set Veeam backup every day, then set WORM retetion for two days.
- If user set Veeam backup every two day, then set WORM retetion for four days



WORM	
WORM (Write Once, Read Many) When WORM is enabled, dat read-only until retention date ends. Enable WORM protection	a in this folder will remain
O Protect this forever	
O Set retention period on this folder.	
Retention 1 days	
 Set retention period on each file of this folder. 1 days 	
	Cancel Next
Figure 2-2 Configuration for W	ORM Setup

(4) Click on the ${\bf Confirm}$ button if all information is correct

WORM
Folder name worm
WORM protect this folder retention period in this folder
Retention 1 days
Are you sure you want to set WORM protection on this folder?
Cancel Back Confirm

Figure 2-3 Confirmation: Applying Set Retention Period on Each File of This Folder

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Step 5. Click on the Apply button to apply WORM protection onto designated Share Folder

Figure 2-4 Apply WORM

B. Set Up in Veeam Backup and Replication UI



Step1-1. Click BACKUP INFRASTRUCTURE

→ Select Managed Servers

→ Click Add Server



Figure 2-5 Configuration of Server Adding

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Step 1-2. Click Network attached storage



Figure 2-6 Add Backup Repository

Step 1-3. Choose either one on based on the environment



Figure 2-7 Network Attached Storage



	New Backup Repository
Name Type in a name ar	nd description for this backup repository.
Name	Name: Backup Repository 1
Repository	Description: Created by WIN-054SP65MOQD\Administrator at 4/22/2021 1:34 PM.
Mount Server	
leview	
pply	
Summary	
	< Previous Next > Finish Can

Step 1-4. Type in the **Name** for this backup repository \rightarrow Click **Next**

Figure 2-8 Network Attached Storage

Step 1-5. Type in the location of the **Shared folder** that created in QSAN UI \rightarrow Tick the checkbox in **This share requires access credentials** \rightarrow select or create an account \rightarrow Click **Next**

		New Backup Repository	x
	Share Type in UNC path to share (mapped d to this share.	rives are not supported), specify share access credentials and how backup jobs should write dat	a
Name Share	Shared folder	: 4.50\Tmp BrowseBrowse	
Reposito Mount Se Review	ry This share	requires access credentials:	
Apply Summary	Gateway serv	er: : selection ing server: SP6SMOQD (Backup server) ption to improve performance and reliability of backup to a NAS located in a remote site.	~
		< Previous Next > Finish Cancel	

Figure 2-9 Shared Folder Location



	ivew backup Repository	
Repository		
Type in path	h to the folder where backup files should be stored, and set repository load control options.	
-		
Name	Location	
Share	Path to folder:	
-	j\\192.168.214.50\Tmp	
Repository	Capacity: 3.5 TB	Populate
Mount Server	Free space: 3.5 TB	
Review	Load control	
Apply	Running too many concurrent tasks against the repository may reduce overall perform timeouts. Control storage device saturation with the following settings:	ance, and cause I/
Summary	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

Step 1-6. Check the **Path to folder** is correct \rightarrow Click **Next**

Figure 2-10 Path of folder

Step 1-7. Click Next



Figure 2-11 Mount Server



Step 1-8. Check all the status \rightarrow Click **Apply**

	New Backup Repository	
Review Please review	v the settings, and click Apply to continue.	
Name	The following components will be processed on server WIN-0S4SP6SMOQ	D:
	Component name	Status
Share	Transport	already exists
Repository	vPower NFS	already exists
,	Mount Server	already exists
Mount Server		
Review		
Apply		
Chebyl		
Summary		-16 Juni 11
Summary	Search the repository for existing backups and import them automatical	ily
Summary	Search the repository for existing backups and import them automatica Import guest file system index data to the catalog	ily states and states a
Summary	Search the repository for existing backups and import them automatica Import guest file system index data to the catalog	lly
Summary	Search the repository for existing backups and import them automatica Import guest file system index data to the catalog	ily
Summary	Search the repository for existing backups and import them automatica Import guest file system index data to the catalog Apply Apply	Ily Finish Cance

Figure 2-12 Review

Step 1-9. Click Next

Name	Message	Durat	
Choro	Starting infrastructure item update process	0:00:02	
SHOLE	C Discovering installed packages		
Repository	Package VeeamDeploymentSvc.exe has been uploaded		
	Package VeeamDeploymentDII.dll has been uploaded		
Mount Server	Registering client WIN-0545P65MOQD for package Tra		
Review	Registering client WIN-054SP65MOQD for package vPo		
2577.87N	Registering client WIN-0S4SP6SMOQD for package Mo		
Apply	O Discovering installed packages		
Fummani	All required packages have been successfully installed		
summary	Optimized Detecting server configuration		
	C Reconfiguring vPower NFS service		
	Creating configuration database records for installed pa		
	Collecting backup repository info		
	Creating database records for repository		
	Backup repository has been added successfully		

Figure 2-13 Apply



Step 1-10. Click Finish

	New Backup Repository	x
Summary You can copy the confi	guration information below for future reference.	
Name Share Repository Mount Server Review Apply Summary	Summary: SMB backup repository 'Backup Repository 1' was successfully created. Mount host: WIN-054SP6SMOQD Account admin Backup folder: (192.168.214.50\Tmp Write throughput: unlimited Max parallel tasks: 4	
	< Previous Next > Finish Ga	incel

Figure 2-14 Summary

Step 2. Click **INVENTORY** \rightarrow check all the VMs are included

習 SERVER TOOL	S		VEEAM	I BACKUP AND	REPLICATION		- 8 ×
Add Edit Remove Server Server Manage Server Manage Storage	Rescan Upgrade Tools						
INVENTORY	Q Type in an object name to search for		×				_
(1) Virtual Infrastructure (1) Virtual Infrastructure (1) Standalone Hosts (1) 1921681285 (1) 1921681285 (1) 1921681285 (1) 1921681285 (1) 1921681285 (1) 1921681285 (1) 192168128 (1)	NAME T APP BULD_WIN_2016 Mazda6 NAS_BULD_DE87_1 NAS_BULD_DE87_2 OpenVAS GAN_WIKI_DEBIAN_98 SAN_BULD_DEBIAN_98 SAN_BULD_DEBIAN_98 SW_REPORT SW_REPORT WWware VCenter Server Appliance	USED SIZE 8.2 GB 83.9 GB 512.4 GB 28.6 GB 40.1 GB 33.4 GB 508.5 GB 13.6 GB 16.3 GB 290.3 GB	PROVISI_ 84.3 GB 508.3 GB 512.4 GB 512.4 GB 109.5 GB 48.4 GB 232.3 GB 508.5 GB 504.3 GB 201.5 GB 290.3 GB	FOLDER vm vm vm vm vm vm vm vm vm vm vm vm vm	HOST shepherd Qian.com shepherd Qian.com shepherd Qian.com shepherd Qian.com shepherd Qian.com shepherd Qian.com shepherd Qian.com shepherd Qian.com	GUEST OS Other 2.6.x Linux (Other 2.6.x Linux (Ubuntu Linux (64 Debian GNU/Linu Debian GNU/Linu Ubuntu Linux (64 Other 3.x Linux (64	
HOME INVENTORY Correction History							-

Figure 2-15 INVENTORY



HOME VIEW				- 6
kup Replication I lob * Copy Job * Plan * Virtual machineJobs Restore	Import Backup Actions			
Linux computer. New Backup Job Creates a new backup job.	Type in an object name to search for	X T All jobs		TARGET
File share	ME T TYPE	OBJEC STATUS	LAST RUN LAST RESULT NEXT RUN	TARGET DESCRIPTION
НОМЕ				
HOME				
HOME INVENTORY BACKUP INFRASTRUCTURE				

Step 3-1. Select HOME \rightarrow Click Backup Job \rightarrow Click Virtual machine



Step 3-2. Type a Name for this backup job

	New Backup Job	x
Type in a name and de	escription for this backup job.	
Name Virtual Machines Storage Guest Processing Schedule Summary	Name: Bitchip Job 1 Description: Created by WIN-054SP6SMOQD\Administrator at 4/22/2021 1:36 PM.	
	< Previous Next > Finish Cance	1

Figure 2-17 Name



10	Add Object	5	
Select virtual ma add new VM into	Select objects:	D #65 *	tomatically changes as yo
Name			Add_
Virtual Machines Storage	Mazda6 NAS_BUILD_DEB7_1 NAS_BUILD_DEB7_2		Remove
Guest Processing Schedule	OpenVAS QA-Nessus CAN WIKI DEBIAN 9.8		Exclusions
Summary	SAN_BUILD_DEBIAN_9 SW_GIT		+ Up
			Recalculat
	*• Type in an object name to search for	Q	Total size: 0 B
		Add Cancel	

Step 3-3. Click Add \rightarrow Choose a Virtual Machine to Add Object for backup

Figure 2-18 Add Virtual Machine

Step 3-4. Click Next

10				
Select virtual add new VM i	nes machines to process via container, or granularly. Cont nto container.	ainer provides dynamic selection th	at automatica	ally changes as y
Name	Virtual machines to backup:			
Virtual Machines	Name	Type	Size	Add
The cost indefined	APP_BUILD_WIN_2016	Virtual Machine	8.24 GB	Remov
Storage				
Guest Processing				Durchusing
Schedule				Exclusion
Summary				
				t Up
				+ Down
				Recalcul
				Total size: 8.24 GB

Figure 2-19 Virtual Machines



Step 3-5. Select **Backup repository** to map backup \rightarrow Click **Advanced**



Figure 2-20 Storage

Step 3-6. Select Scripts \rightarrow Tick the checkbox of Run the following script after the job: \rightarrow Click Browse

Advanced Settings	×
Backup Maintenance Storage Notifications vSphere Integration Scrip	pts
Job scripts Run the following script before the job:	Browse
Run the following script after the job: C\create_snapshots.ps1	Browse
Run scripts every 1 🗘 backup session	
Run scripts on the selected days only Saturday	Days
Save As Default OK	Cancel

Figure 2-21 Add Scripts in Advanced Settings



Step 3-7. Choose PowerShell Files (*.ps1) file type \rightarrow Select the script file downloaded from QSAN



Figure 2-22 Select Script File

Step 3-8. Check the script file is the right one \rightarrow Click OK

	Advanced Settings	
Backup	Maintenance Storage Notifications vSphere Integration Scripts	
Job s	cripts	
	Run the following script before the job:	Browse
~	Run the following script after the job:	
	C:\create_snapshots.ps1	Browse
۲	Run scripts every 1 🗘 backup session	
0	Run scripts on the selected days only	Days
Save As	Default	Cancel

Figure 2-22

Script file to run after the job



Step 3-9. Select by the needs \rightarrow click **Next**

	New Backup Job	
Guest Process Choose guest (ing OS processing options available for running VMs.	
Name Virtual Machines	Enable application-aware processing Detects and prepares applications for consistent backup, performs transaction logs proces configures the OS to perform required application restore steps upon first boot.	sing, and
Storage	Customize application handling options for individual machines and applications	Application
Guest Processing Schedule	Enable guest file system indexing Creates catalog of guest files to enable browsing, searching and 1-click restores of individ is optional, and is not required to perform instant file level recoveries.	ual files. Indexi
Summary	Customize advanced guest file system indexing options for individual machines	Indexing
	Guest interaction proxy:	
	Automatic selection	Choose
	Guest OS credentials:	
	Y	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

Figure 2-23 Guest Processing

Step 3-10. Tick the checkbox on **Run the job automatically** \rightarrow Set the backup **Schedule** \rightarrow refer to QSAN UI WORM schedule

[Note] Schedule set up proportion is 1:2 (Veeam backup : WORM)

For example:

- If user set Veeam backup everyday, then set WORM retetion for two days.

- If user set Veeam backup every two day, then set WORM retetion for four days



Schedule						
Specify the job sc	heduling options. If you do not set t	the schedule, th	he job	will need to be contr	olled manually.	
Name	 Run the job automatically 	/				
Virtual Machines	Daily at this time:	10:00 PM	~ ~	Everyday	ý	Days
Storage	 Monthly at this time: 	10:00 PM	^	Fourth ~	Saturday ~	Months.
Storage	O Periodically every:	1	~	Hours	~	Schedule
Guest Processing	O After this job:					
Schedule	Automatic retry		-			_
Summary	 Retry failed items pro 	cessing:	3	🗘 times		
	Wait before each retr	y attempt for:	10	minutes		
	Backup window					
	Terminate job if it exc	ceeds allowed	backu	p window		Window
	If the job does not co	mplete within	alloca	ated backup window,	it will be terminated to	
	prevent snapshot con	nmit during pr	oducti	ion hours.		

Figure 2-24 Schedule

Step 3-11. Reconfim for all the settings→Click **Finish**

	New Backup Job
Summary The job's setting:	s have been saved successfully. Click Finish to exit the wizard.
Name Virtual Machines Storage Guest Processing Schedule Summary	Summary: Name: Backup Job 1 Target Patit: \1921.68.214.50\Tmp Type: VMware Backup Source items: APP_BUILD_WIN_2016 (192.168.128.5) Command line to start the job on backup server: "C\Program Files\Veeam\Backup and Replication\Backup\Veeam.Backup.Manager.exe" backup f5317929- a1f0-4bd7-8dca-aa4cdfdba51f
	I Run the job when I click Finish
	< Previous Next > Finish Cancel

Figure 2-24 Summary





記 HOME VIEW		VEEAM BACKUP AND REPLICATION – 5 ×					
Backup Replication Job - Job - Primary Jobs	er Import be Actions						
HOME	Q Type in an object name to search for	× T All jobs					
 Bobs Backup Last 24 Hours 	NAME T TYPE	OBJECL STATUS 1 Stopped	LAST RUN LAST RESULT NEXT RUN 4/22/2021 10	TARGET DESCRIPTION Backup Repository 1 Created by WIN-OS			
A HOME							
BACKUP INFRASTRUCTURE							
HISTORY							
	<	Ш		>			

Figure 2-24

Done Setting in Veeam Backup and Replication UI

Step 4-1. Find the Scipt file downloaded from QSAN \rightarrow Right-click \rightarrow Edit

3 L -	L	oca	l Disk (C:)		-		
File Home Share View						~	
🕞 💿 👻 🛧 🕹 🕨 This PC 🕨 Local Disk (C:)			~ C	Search Local D	isk (C:)	\$	
This PC	Name		Date modified	Type		Size	
Desktop	create_snapshots.p	e1	A/22/20031 32:0	4/22/2023 32:02.084 Mindowe PowerSh.			
Documents	 create_snapshots_c sync64.exe rdfc.exe 38CB5CF10627 .DS_Store 		Run with PowerShell		owersn		
 Music Pictures Videos 			Open with Sublime Text 7-Zip CRC SHA		File		
 Local Disk (C) g1 (\\192.168.139.5) (O:) c1 ()102.168.139.5) (C) 	slptool.exe		Open with Share on	1	extens File extens		
🕵 Network	 afp.log DS_Store msdia80.dll _Program Files _Program Files (x86) 		Add to archive Add to "create_snapshots.rar" Compress and email Compress to "create_snapshots.rar" Restore previous versions	and email			
	< PortQryUI		Send to Cut	1	•	3	
9 items 1 item selected 1.76 KB			Сору			曲	



Figure 2-25 Make custom-changes on the Script

Step 4-2. Change the following customize items :

- i. NAS IP address: into your NAS IP
- NAS login user name ii.
- iii. Nas login password
- NAS shared folder name (Snapshot) : into the folder name you create for snapshot iv. (set in QSAN UI)



v. NAS shared folder name (WORM): into the folder name you create for WORM (set in QSAN UI)



Figure 2-26

5 Items Change in the Script

Summary

The Integration between QSAN and Veeam bring higher data protection level for all business. In the age of advances in information technology, cyber-attack becomes the main issue for most business to conquer. Try to apply Veeam Backup with Snapshot and WORM mechanism to prevent from any ransomware attack. After setting up by the steps listed above then the business can enjoy the automatic data protection process.



Appendix

Related Documents

There are related documents which can be downloaded from the website.

- All XCubeNXT Documents
- <u>QSM_WORM White Paper</u>
- XCubeNXT Hardware Manual
- XCubeNXT_Software Manual
- <u>Compatibility Matrix</u>
- <u>White Papers</u>
- <u>Application Notes</u>

Technical Support

Do you have any questions or need help trouble-shooting a problem? Please contact QSAN Support, we will reply to you as soon as possible.

- Via the Web: <u>https://www.qsan.com/technical_support</u>
- Via Telephone: +886-2-77206355 (Service hours: 09:30 - 18:00, Monday - Friday, UTC+8)
- Via Skype Chat, Skype ID: qsan.support (Service hours: 09:30 - 02:00, Monday - Friday, UTC+8, Summer time: 09:30 - 01:00)
- Via Email: support@qsan.com