

# XMirror

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Edition 1.0 (February 2019)



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# Preface

# About This Guide

This guide would help the XCubeNAS user can backup and sync data to different NAS with XMirror. We will introduce how to configure XMirror in the following chapter.



### **CAUTION:**

Do NOT attempt to service, change, disassemble or upgrade the equipment's components by yourself. Doing so may violate your warranty and expose you to electric shock. Refer all servicing to authorized service personnel. Please always follow the instructions in this owner's manual.

### **Technical Support**

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

- Via the Web: <u>http://www.qsan.com/en/contact\_support.php</u>
- Via Telephone: +886-2-7720-2118 extension 136 (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, Summertime: 09:30 - 01:00)
- Via Email: <u>support@qsan.com</u>



# Information, Tip and Caution

This manual uses the following symbols to draw attention to important safety and operational information.





# XMirror

# Audience

This document is applicable to QSAN customers and partners who are interested in learning about XMirror. 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.

## Introduction

Along with increasing in demand of the backup in recent year, we notice the traditional snapshot replication and remote replication which is well known as Rsync are not enough for the customer's diverse environment. So we provide the new backup feature – XMirror which is QSAN's unique feature. It provides the customer more convenient with backup/restore, and more security of backup transferring.



### **INFORMATION:**

The XMirror backup process will be triggered when the data is in the idle status which means if the user keeps accessing and editing the data, the data won't sync to other NAS.



# Theory of operation

We will introduce the XMirror concept and operation, please refer below.

### Zone

The concept of XMirror is based on the "Zone", XMirror can create a zone which involves multiple NAS folder (Max:8). Then XMirror will keep syncing the data in this backup zone automatically, make sure all the folder have stored the same data. Please refer below about more XMirror opearation.

#### 1-way zone & 2-way zone

First, in the zone, there is a folder is called – local folder. If you set the zone as 1-way snyc zone, any changes from this NAS local folder of this zone will sync to other folders, but any changes from other folders will not sync to this NAS local folder of this zone.

But if you set this zone as 2-way sync zone, any changes from each folder will be sync with each other together of this zone.

#### Version rollback

Sometimes user might edit the file by mistake, we provide the version rollback which will help the user to rollback the file to the specific version. The default number of versions is "1", and the maximum number of versions is "64". A version will be generated each time of synchronization.



#### **INFORMATION:**

Please aware the version rollback of local folder can only be operated in 2-way sync zone because the version rollback functions help the user to restore the file which was deleted by XMirror.

And in 1-way sync zone, only the data which in the remote folder might be deleted by XMirror. Let's take the example here, if user deletes the data-A from local folder, then XMirror will make sure the data consistency with remote folders, so the dada-A in remote folders will also be deleted by XMirror.



# **Configure XMirror**

Here is an example of creating 1-way sync & 2-way sync zone with two XCube NAS units.

### Setup 1-way sync

1. In the Backup app->XMirror, and add Synchronization Zone

800 < > I	Backup	0
Snapshot	Add Synchronization Zone	
😭 Remote Backup	Add Synchronization Zone	
O Cloud Backup	Xmirror Zone Creating wizard	
S Xmirror	This wizard will guide you to create or join a zone on XCubeNAS step by step	
🗐 Log	Create a new zone	
	Join a zone from another XCubeNAS	
	Cancel	

#### 2. Select 1-way sync zone





◎ □ □ < > □		Backup				?
Snapshot	Add Synchronization Zone					
🍓 Remote Backup			Add Synchronization	n Zone		
Cloud Backup	Zone name	Zone name Zone				
	Select a local folde	r S1/	- T			
E Log	📓 backup	>	i backup	>		
			📜 S1	>		
	•		III		•	
				Cancel	Back Next	
						_

3. Enter the zone name and also select a local folder

### 4. Check the Zone summary

800 <> I	Backup	0
👩 Snapshot	Add Synchronization Zone	
🔒 Remote Backup	Add Sy	nchronization Zone
Oloud Backup	Zone summary	1
	Zone name Zone	
🗍 Log	IP address 192.168.214.170	
	Zone type 1-way sync zone	
	Local folder backup/S1/	
		-
		Cancel Back Confirm



	Backup	0
Snapshot	Add Synchronization Zone	* ~
Remote Backup	✓ Zone (1-way sync)	*
Cloud Backup	Local Domain	
5 Xmirror	$\wedge$	
Log		
	R0/backup/S1/	

5. Here can see the zone has been created, then we will also need to join another NAS to this zone

6. Switch to another NAS, and select join a zone in the Backup app -> XMirror

	В	ackup	
💽 Snapshot	Add Synchronization Zone		
Remote Backup		Add Synchronization Zone	
🔊 Cloud Backup	Xmirror Zone Creat	ing wizard	
		e you to create or join a zone on XCubeNAS step by step	
E Log	<ul> <li>Create a new zon</li> <li>Join a zone from</li> </ul>		
		Cancel	Next



800 < X 🗉		Backup			
Snapshot	Add Synchronization Zone	2			
Remote Backup			Add Synchronization 2	Zone	
Cloud Backup		Find a zone			
💮 Xmirror		IP address / Host name	192.168.214.170	~	
🔟 Log		Username	admin		
		Password			
		Test			
				Cancel Bac	k Next
				Genter Bat	Next

7. Type the IP, username and password of the NAS which we created the zone

### 8. Select the Zone

800 C ) 🔲	Backup	0
👩 Snapshot	Add Synchronization Zone	
📸 Remote Backup	Add Synchronization Zone	
9 Cloud Backup	Select zone	
	IP address 192.168.214.170	
E Log	Zone Name & Type Zone (1-way sync zone) 🗸	
	Cancel Back Next	

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9. Check the Zone summary again

		Back	up		0
💽 Snapshot	Add Synchronization Zone				
😭 Remote Backup			Add Synchronization Z	one	
Cloud Backup	Zone	summary	( ) ( )		
	IP add	9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	192.168.214.170		
🗐 Log	Zone	name	Zone		
	Zone	type	1-way sync zone		
	Local	folder	QQ/T1/		
	Remo	te folder(s)	1.192.168.214.170/backup/S1		
				Cancel Back Confirm	

10. Then we will see both NAS are in the same zone successfully

	Backup	?
Snapshot	Add Synchronization Zone	<b>*</b> ~
📸 Remote Backup	✓ Zone (1-way sync)	÷
<ul> <li>Cloud Backup</li> </ul>	Local Domain	
5 Xmirror	$\wedge$ $\vee$	
E Log		
	R0/backup/S1/ XN7008R-FF165	

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### Setup 2-way sync

The only different procedure is in the step2. of **Setup 1-way sync**, please select 2-way sync zone as below.





### Best practice

### Case : 1-way sync vs. 2-way sync

The advantage of 1-way mirror is that it will keep data syncing to multiple remote folders automatically, and if one of the remote folders occurs data losing issue or hacking issue, it won't affect the data in the local folder or others remote folders.

However, if the local folder has any data corrupted which cause the data loss issue, we can easily get back with the version rollback function on the remote folder. This can satisfy most of the user who has high demand for data security and importance.

But for the 2-way sync, we can easily make all the folders in this zone to have the same data automatically, when data was modified will sync to others folder. This will help some co-work team which needs to sync the same data in their environment. Then 2-way sync can drastically decrease their time-consuming to improve the work efficiency.

### Conclusion

XMirror provides 1-way sync, 2-way sync, and version rollback functions. The user can depend on their demand to configure the XMirror zone in their environment. And also rollback to the previous version to restore the data back. The synchronization zone concept makes XMirror can satisfy most of the users of backup demand.

# Apply to

XCubeNAS XN3000/5000/7000/8000 series FW 1.0.0 and alter

# Support and Other Resources

# 1.1. Getting Technical Support

After installing your device, locate the serial number on the sticker located on the side of the chassis and register your product at <u>partner.qsan.com/</u> (End-User Registration). We recommend registering your product in QSAN partner website for firmware updates, document download, and latest news in eDM. To contact QSAN Support, please use the following information.

- 1. Via the Web: <u>http://www.qsan.com/en/contact\_support.php</u>
- 2. Via Telephone: +886-2-77
- -2118 extension 136 (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, Summertime: 09:30 - 01:00)
- 5. Via Email: <a href="mailto:support@qsan.com">support@qsan.com</a>

### **Collect Information for Analysis**

- 1. Product name, model or version, and serial number
- 2. Firmware version
- 3. Error messages or screenshot images
- 4. Product-specific reports and logs
- 5. Add-on products or components installed
- 6. Third-party products or components installed

### **Information for Technical Support**

The following system information is necessary for technical support, please refer to following for what and where to get the information of your XN3002T model.

If the technical support requests you to download the service log, please navigate to the QSM UI  $\rightarrow$ Control Panel  $\rightarrow$  System  $\rightarrow$  Maintenance  $\rightarrow$  Import/Export  $\rightarrow$  Export system diagnosis report, and then click the Export button.



	C Control Panel	٩ ()
<ul> <li>System</li> </ul>	System Update System Recovery Impor	rt / Export
General Settings	Import configuration file	
Network	Select configuration file from your system.	
Security	Import	
Connection	Export configuration file	
Notification	Select the type and click 'Export' button to export the configuration file	
Power	Configuration	
E Log	Accounts	
Maintenance	Configuration and accounts	
> Storage	Export	
> File Sharing	Export system diagnosis report	
> Network Service	Click 'Export button to export the system diagnosis report to your system.	
	Export	
	$\mathbf{\setminus \circ \circ \circ \circ}$	

# 1.2. Documentation Feedback

QSAN is committed to providing documentation that meets and exceeds your expectations. To help us improve the documentation, email any errors, suggestions, or comments to <u>docsfeedback@qsan.com</u>.

When submitting your feedback, including the document title, part number, revision, and publication date located on the front cover of the document.



# Appendix

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- QSAN reserves the right to modify this EULA.
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- QSAN may assign its rights and obligations under this EULA to any third party without condition.
- This EULA will be binding upon and will inure to User's successors and permitted assigns.
- This EULA shall be governed by and constructed according to the laws of R.O.C. Any disputes arising from or in connection with this EULA, User agree to submit to the jurisdiction of Taiwan Shilin district court as first instance trial.