# Unified Storage Series White Paper

# Backup applications

Edition 1.0 (2020)

This edition applies to QSAN Unified storage systems. QSAN believes the information in this publication is accurate as of its publication date. The information is subject to change without notice.

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This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products.

All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

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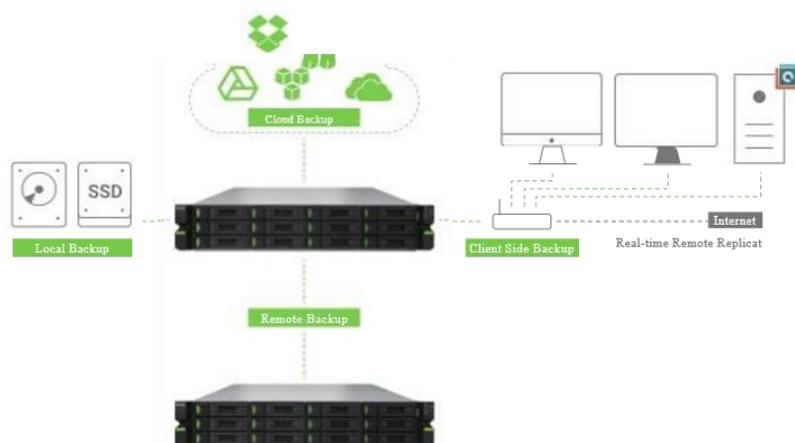
QSAN

# 1.    Overview

Modern businesses' data faces many potential threats such as unexpected hardware failure, natural disasters, or unintended deletion, which might cause loss of your critical digital assets. The mainstream adoption of cloud, remote and external storage devices for storing documents makes data fragmented.

The explosion in data volume sizes and their demands for efficient data retention methods mean that the Unified Storage is the perfect solution to fit modern data requirements.

## Backup Your Business Data

QSAN Unified Storage effectively addresses the above challenges by providing comprehensive and effective backup solutions that assist you design a complete and efficient backup solution to minimize the risk of data loss. Various storage devices, remote servers, public clouds even other storage can be seamlessly integrated into your unified storage, achieving an all-encompassing backup solution allowing data to be free, safely and efficiently preserved.

- Client side backup
- Remote backup
- Cloud backup
- Local backup

# 2. Backup Application

## 2.1. Multi-protocol support

This chapter will show what kind of protocol that QSM support and best application for every protocol.
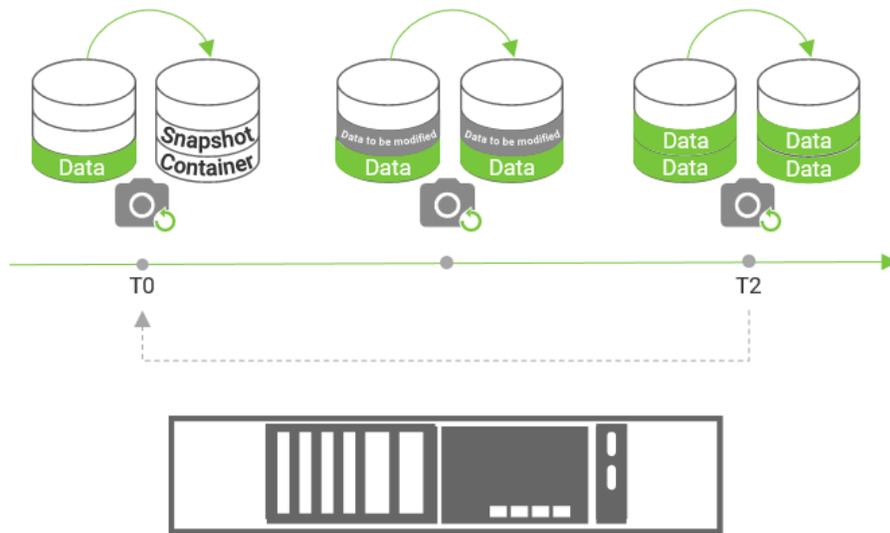
The table lists all recommend backup application for different environment:

| | File type | Schedule type | Space required | Suitable environment |
|---|---|---|---|---|
| Snapshot replica | LUN & Shared folder | Schedulable | High | Media editing / VM(mount NFS) |
| Remote backup | Shared folder | Schedulable | Normal | Office environment & Backup with other platform |
| XMirror | Volume & Shared folder | Immediacy | Normal | School & Immediacy environment |
| Cloud Sync | Shared folder | Schedulable & Immediacy | Normal | Soho environment |
| Cloud backup | Shared folder | Schedulable | Normal | With existed cloud |

## 2.2. Snapshot & Replication

Snapshots record the status of shared folders and iSCSI LUNs as changes happen on write. By periodically taking snapshots, administrators can better control data versions and execute point- in-time recovery on folders and LUNs, and these can be flexibly restored to previously known good states.
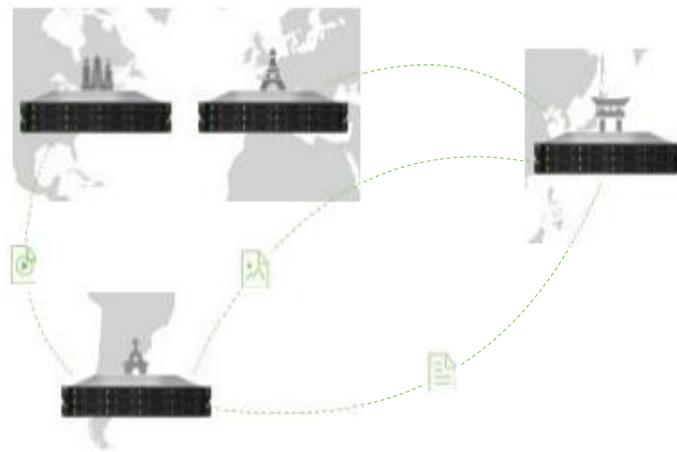
Moreover, the valuable Timeline snapshots make the backup period longer. Snapshot replication provides the ability to transport the version information to another storage. With the compelling snapshot function, not only the speedy delta generation of snapshots but the ultimate transmission performance, snapshot replication is the ideal backup solution in a local and remote destination.

## 2.3.    XMirror

XMirror regularly synchronizes a volume, or the contents of a folder between multiple storage devices, any modification to documents will be replicated to other unified storage. Data consistency and availability can be secure among different storage system by using XMirror.

• Support Volume and Folder mirror.

• 1‑way (unidirectional): data modification of the local storage will be synchronized to the remote, but any data modification of remote storage will not be reflected.

• 2‑way (bi‑directional): any data modification of a storage will be synchronized to the others.

• Version control (64 versions).

• Permission synchronization between devices.

## 2.4. Remote Backup - Rsync

Data copies can be distributed to your trusted storage locations through remote backup. Using Rsync, you can directly transfer data between Windows / Linux server and unified storage, or transfer between unified storages.

By periodically copying data to different branches, your data can be recovered in the unfortunate event that a disaster happens. Data availability is ensured, offering businesses more options for a contingency and recovery plan.

## 2.5. Cloud backup & S3

Cloud backup ensures that you can back up your data to multiple cloud services such as, Amazon S3, HiCloud S3, Alibaba OSS cloud, S3 compatible services, Google Drive, OneDrive, and Dropbox. You can build a hybrid cloud which allows you to access and back up the files on mobile devices, PCs, or thin clients anytime and anywhere. QSAN Unified Storage can be a cloud gateway to bridge your public cloud and private content and act as a central access point.

## 2.6. 3rd party backup applications

Unified Storage series supports standard network protocols that will work with popular 3rd party backup tools such as Symantec, Commvault, Veeam, and Acronis. Now you can use XReplicator to back up your data, or contact QSAN to purchase Acronis server backup and cyber backup specially designed for QSAN to get more advance features.

# 3.    Support and Other Resources

## 3.1.    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 partner.qsan.com/ (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: http://www.qsan.com/en/contact_support.php
2. Via Telephone: +886-2-7720-2118 extension 136
   (Service hours: 09:30 - 18:00, Monday - Friday,
   UTC+8)
3. Via Skype Chat, Skype ID: qsan.support
   (Service hours: 09:30 - 02:00, Monday - Friday, UTC+8, Summertime: 09:30 - 01:00)
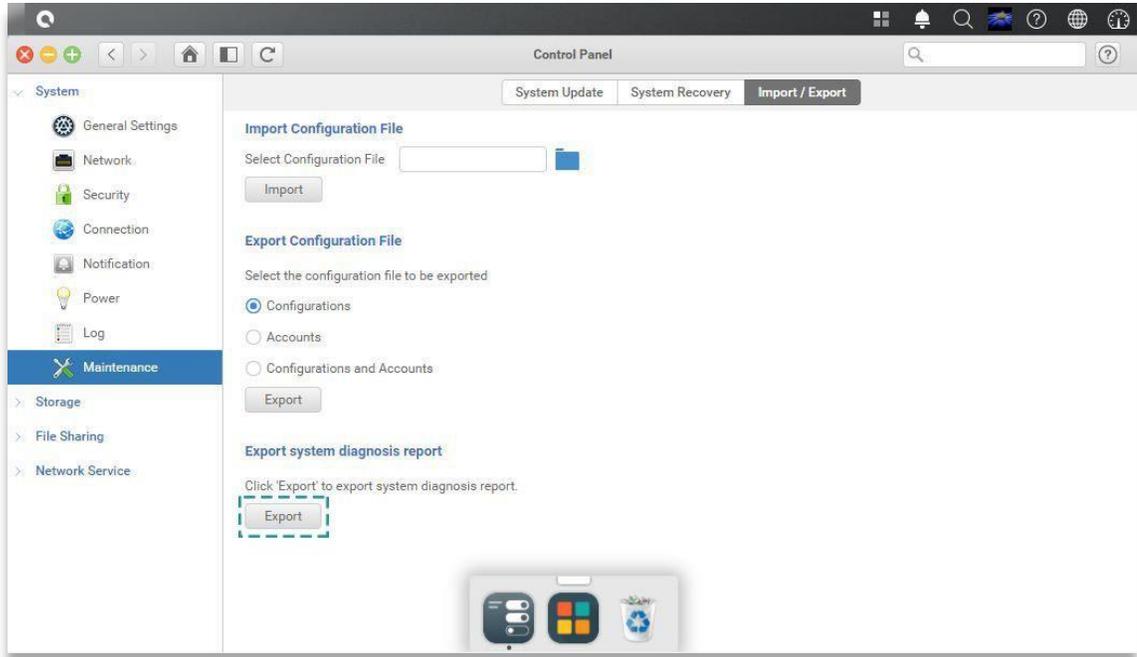4. Via Email: support@qsan.com


Information to collect
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 Unified Storage XN8012R model.

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

## 3.2. 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 docsfeedback@qsan.com.

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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