



**QNAP**

# **QNAP SSD Cache**

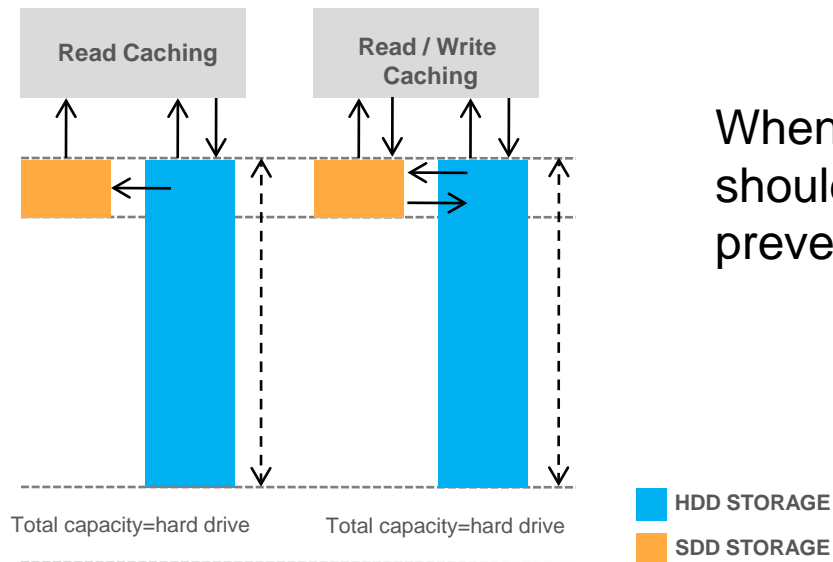
# How is QNAP SSD Cache different from others?

**Optimized SSD Cache configurations for business applications:**

	Other	QNAP
SSD Cache Utilization	One SSD device or RAID for one volume / LUN	Global cache for all volumes / LUNs
Enable/Disable SSD Cache	Service interrupted	Service up and running
SSD recovery after Hot plug (read cache)	Service interrupted	Service up and running
SSD recovery after Hot plug (read-write cache)	Service interrupted	Service up and running

# Read Write Cache

## The difference between Read-Only and Read-Write Cache:



When using Read-Write Cache, SSD cache should be created as a protected RAID to prevent data loss.

# SSD Cache for one volume/LUN

SSD Cache that can only apply to one volume at a time:

User can only select Read-Only Cache when have multiple volumes with 2 SSD.

SSD Cache Creation Wizard

Select SSD and volume/iSCSI LUN

Mount on: Volume 1

	Number		Disk Size	Model
<input checked="" type="checkbox"/>	Disk 2	Volume 1 SHR, btrfs	238.47 GB	SSD 850 PRO 256GB
<input checked="" type="checkbox"/>	Disk 4	Volume 2 SHR, btrfs	167.68 GB	SSDSC2BW180A4

Back Next Cancel

Storage Manager

Create Repair Remove Configure SSD Cache Advisor

SSD Cache 1 - Normal  
238.47 GB

SSD Cache 2 - Mounting... (Waiting...)  
0.00 GB

Overview  
Volume  
Disk Group  
HDD/SSD  
iSCSI LUN  
iSCSI Target  
Hot Spare  
SSD Cache

# QNAP Global On-Demand SSD Cache

SSD Cache that can apply to all volumes and iSCSI LUN with single setup:  
Allows user to apply global Read-Write Cache on multiple volumes.

The screenshot displays the 'Storage & Snapshots' web interface. The left sidebar contains navigation links: Overview, Storage, Snapshot, Disks/VJBOD, Storage/Snapshot, Cache Acceleration (selected), External Storage, Snapshot Backup, Snapshot Replica, Snapshot Vault, iSCSI, iSCSI Storage, Remote Disk, and LUN Backup. The main content area is titled 'Cache Acceleration' and features a green 'ON' toggle switch. Below the toggle, a 'Usage' bar shows 'Allocated: 0%' and 'Free: 100%'. A table of settings is visible: Service: Enabled, Capacity: 108.64 GB, Cache Type: Read-Write, Cache RAID: RAID 1, Read Hit Rate: 0%, Write Hit Rate: 97%, Cache Flushing: -, and Status: Ready. To the right, a 'Hit Rate History' graph shows a sharp increase in hit rate over time. Below the graph, a table lists the cache configuration for various volumes.

Name/Alias	Capacity	Status
DataVol1	245.44 GB	Ready
DataVol2	688.37 GB	Ready
DataVol3	688.37 GB	Ready
DataVol4	693.84 GB	Ready
DataVol5	688.37 GB	Ready
DataVol6	325.27 GB	Ready

# **QNAP Hybrid Backup Sync**

## **Solid Backup Solutions for Data Security and Recovery**

**To realize 10GbE high performance backup experience**

QNAP Systems, Inc.

# A Solid Data Protection Solution in one App



## Hybrid Backup Sync

**Backup**



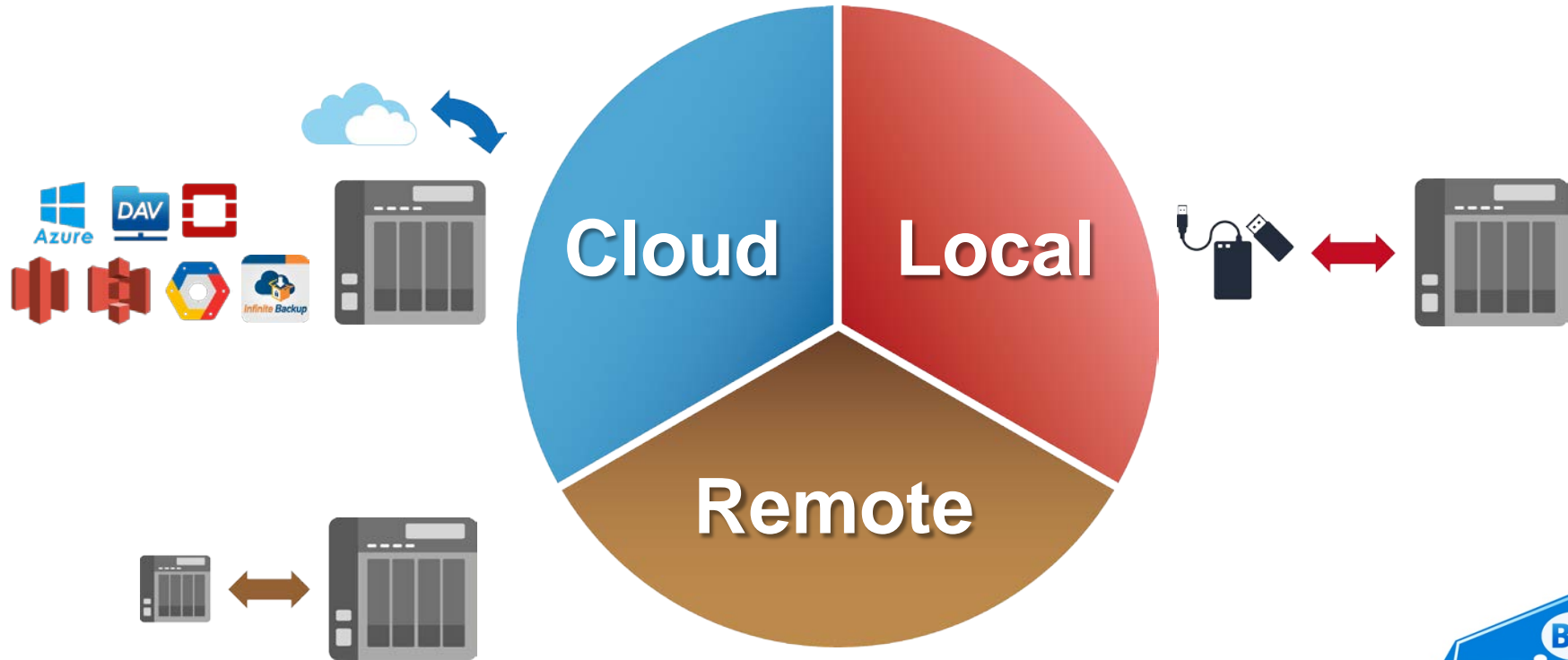
**Restore**



**Sync**

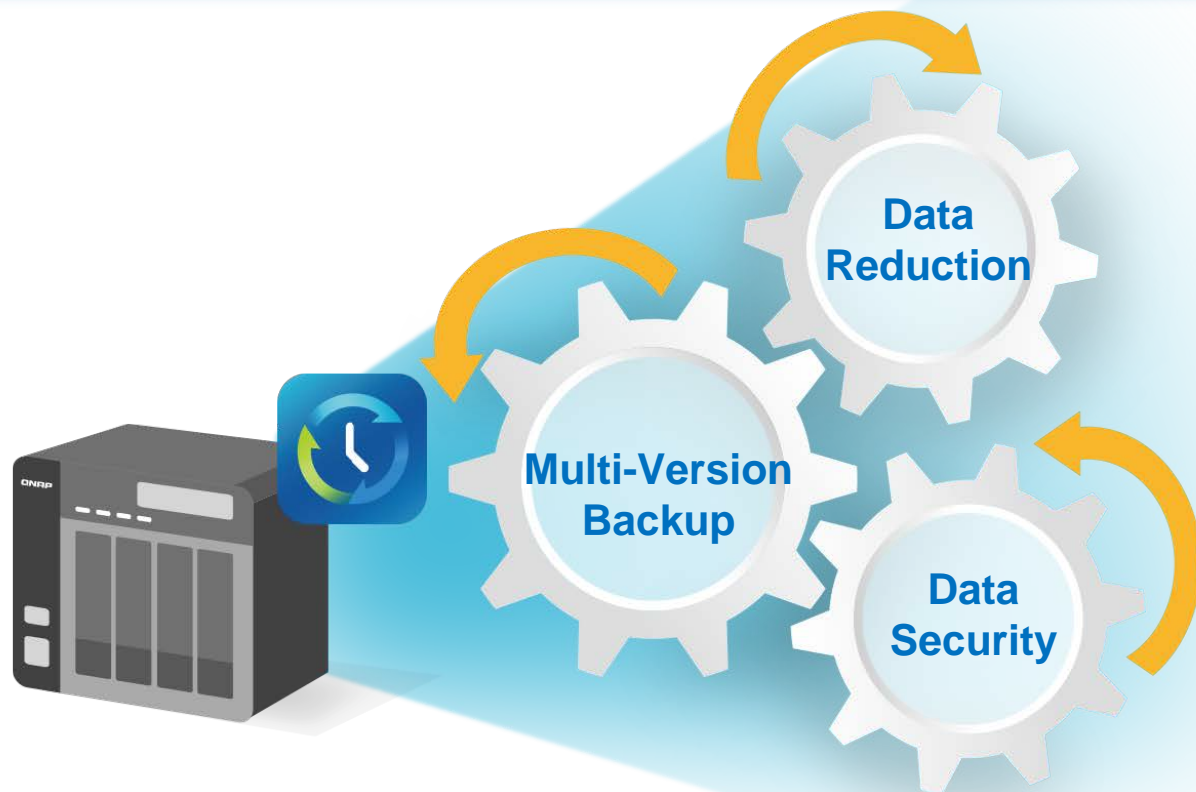


# Backup – Hybrid Cloud Perfectly Integrated





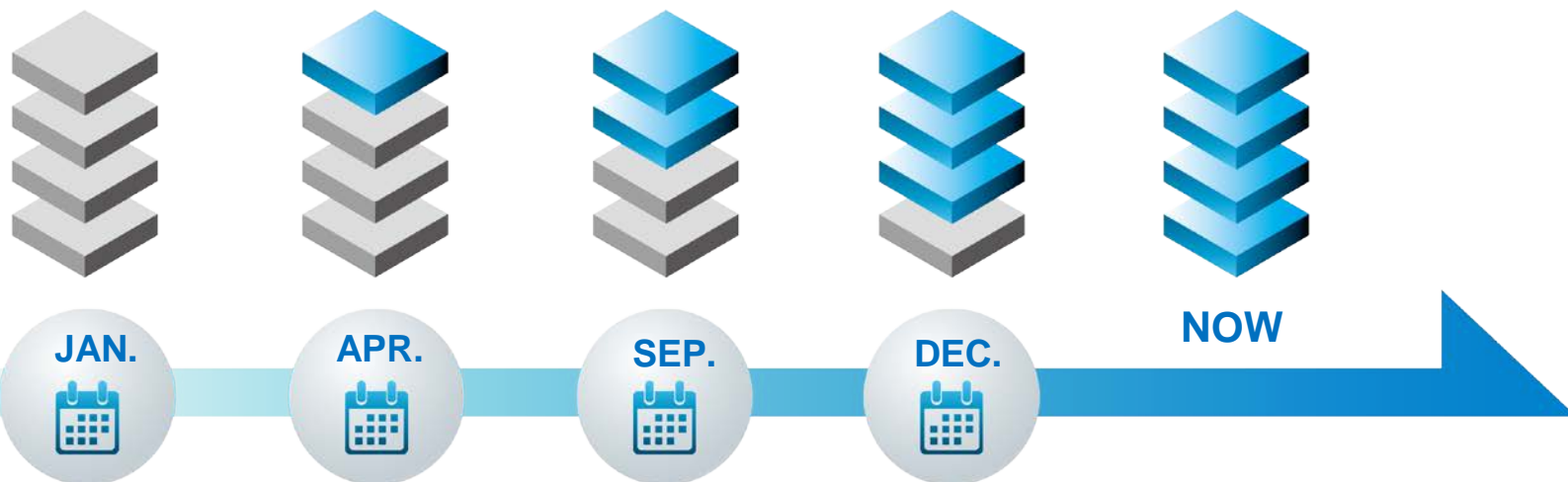
# Backup - Essential of Smart Backup



# Multi-version Backup

■ Simple versioning

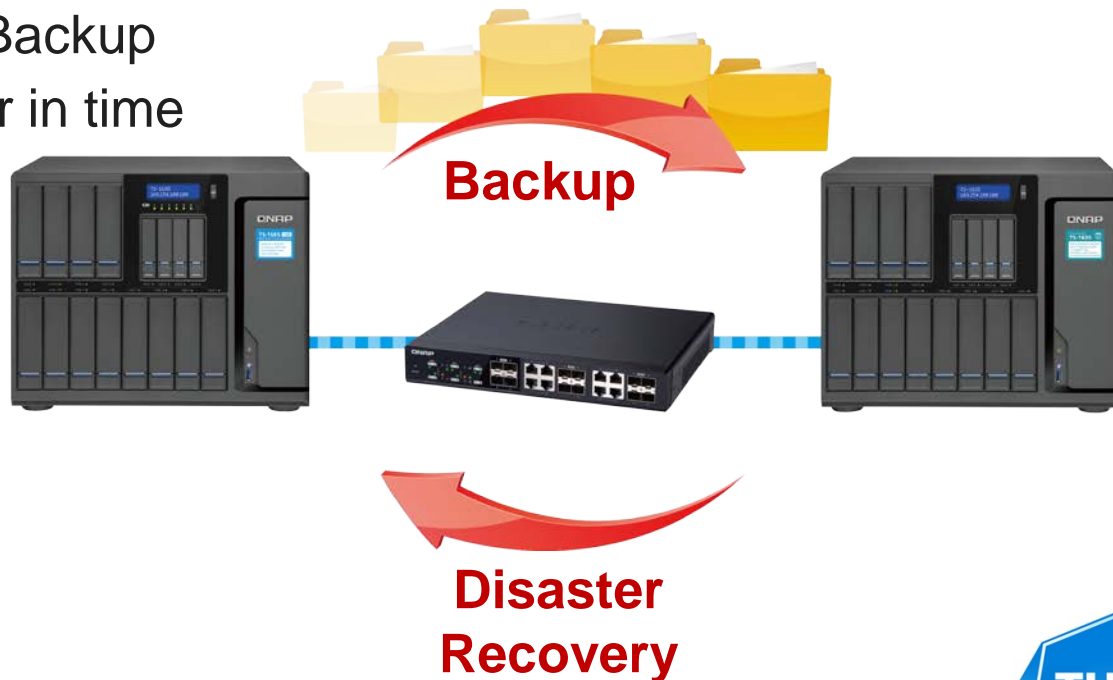
■ Smart versioning



# Back up over 10 Gigabit Ethernet

## Economical enterprise-level disaster recovery solution

- ✓ Highly Efficient Data Backup
- ✓ Recover from Disaster in time
- ✓ Protect the sensitive and classified data

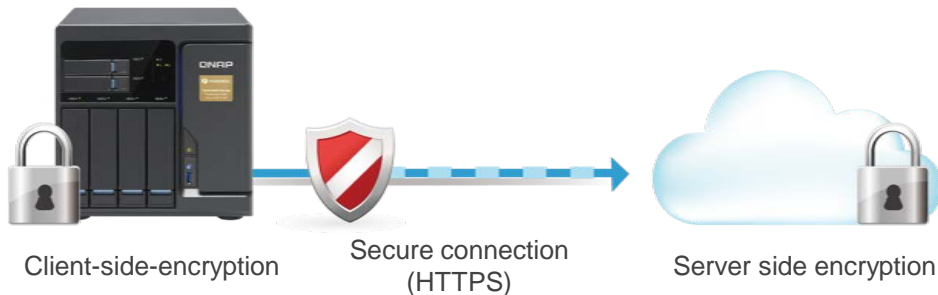


# Demo – Remote Backup

10GbE Backup (RTRR) / 1GbE Backup (RTRR) performance comparison  
Enable multi-version backup

# Cloud Security and Data Reduction

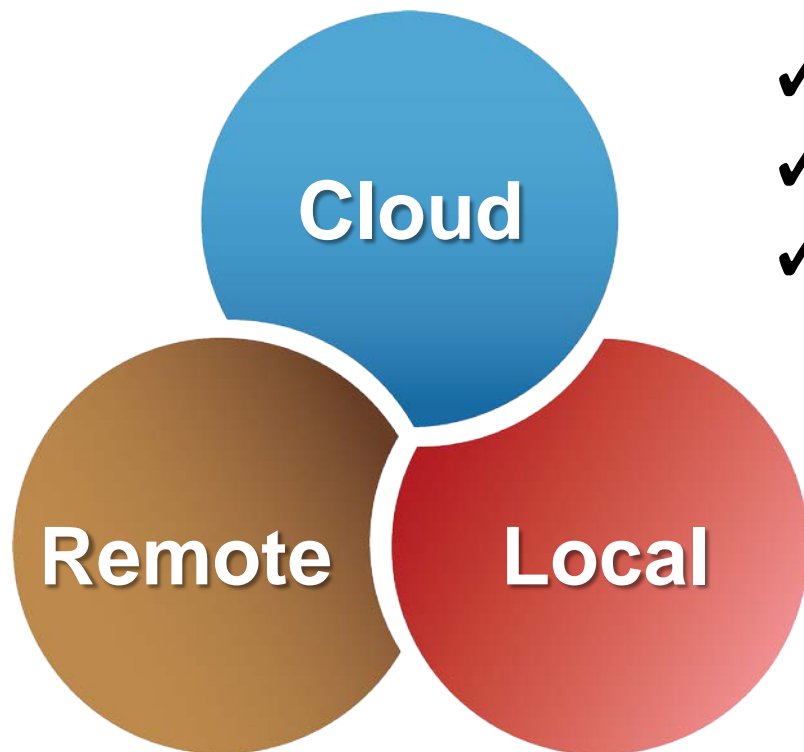
- Secured connection (HTTPS)
- Server-side encryption
- Client-side encryption

**01****Data Filter: Data size/Date/Type****02****Data Compression****03****Sparse File Detection**

# Demo – Cloud Backup

Client-side encryption

# Sync – Access the data anytime and anywhere



- ✓ One-way Sync
- ✓ Active Sync
- ✓ Two-way Sync

# Cloud Sync - Flexible Settings to Meet Your Needs



**Mirror**



**Copy**



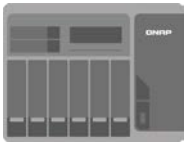
**Move**



RTRR

CIFS/SMB

FTP



# Demo – Sync



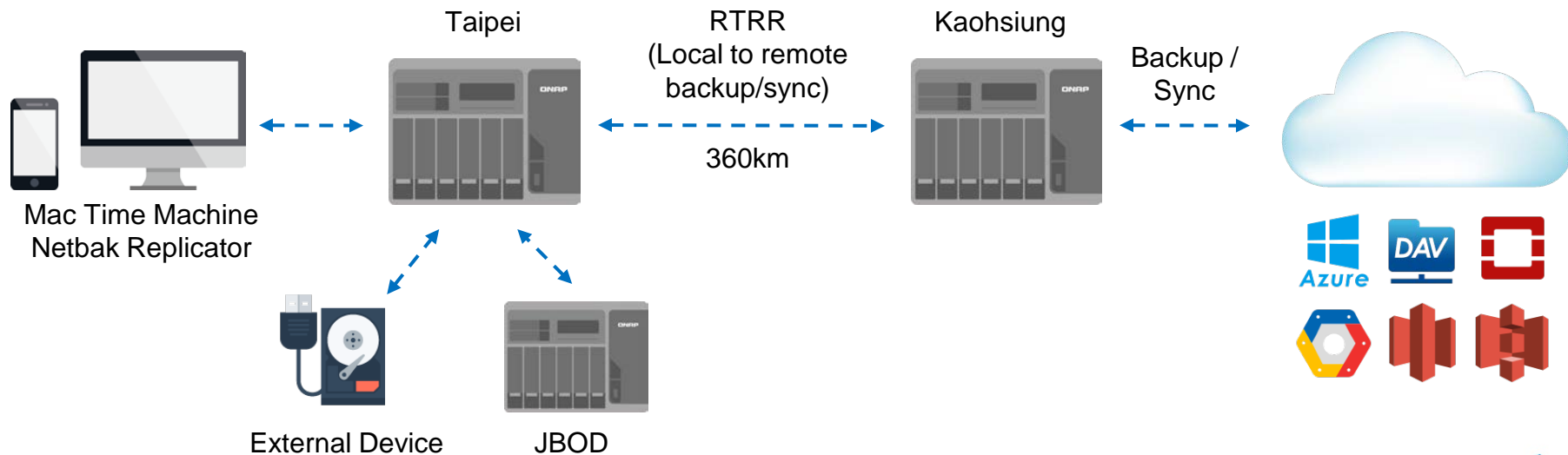
One-way sync job: RTRR / Rsync  
Active sync job

# Comprehensive Data Protection Solutions

## Local

## Remote

## Cloud



# Get More information

<https://www.qnap.com/solution/hybrid-backup-sync/en/>

Download Hybrid Backup Sync



Hybrid Backup Sync is now available from the QTS App Center.

**Thank you**