

QNAP



Back up your Mac

with Time Machine

function on a QNAP NAS

Apple's Mac shipments ranked fourth in the world as PC market

- Mac PC shipments are growing year over year
- Enterprises have increased purchase intention for Mac

Preliminary Worldwide PC Shipment 1Q18

	1Q18 Shipments	1Q18 Market Share(%)	1Q17 Shipments	1Q17 Market Share(%)	1Q18-1Q17 Growth(%)
HP Inc.	12,856	20.8	12,505	20.0	2.8
Lenovo	12,346	20.0	12,305	19.7	0.3
Dell	9,883	16.0	9,277	14.8	6.5
Apple	4,264	6.9	4,199	6.7	1.5
Asus	3,900	6.3	4,458	7.1	-12.5
Acer Group	3,828	6.2	4,189	6.7	-8.6
Others	14,609	23.7	15,637	25.0	6.6
Total	61,686	100.0	62,569	100.0	-1.4

<https://appleinsider.com/articles/18/04/11/mac-sales-return-to-growth-in-q1-amid-continued-pc-market-decline>

Mac users' backup habit



Common situations...

- Copy the important data only.
- Never do it.

Why?

- Forgot it.
- Must plug in the external storage.
- Manual backup wastes time.



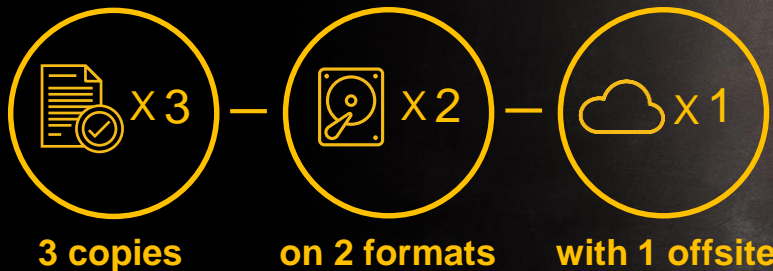
3-2-1 Backup Strategy

What kind of backup solution is safe?

- How many copies?
- Where to store?

Best strategy for complete backup

- Recommend backup approach by the U.S. government
『3-2-1 Backup Strategy』



How to implement 3-2-1 backup strategy for Mac

Traditional backup method

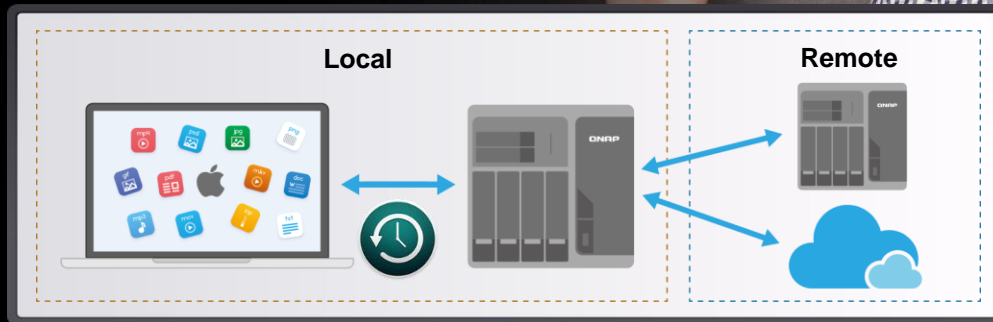
- File copy

What else should be considered?

- Is it enough to only copy files?
- Keep the latest version only?
- How to restore from backup?



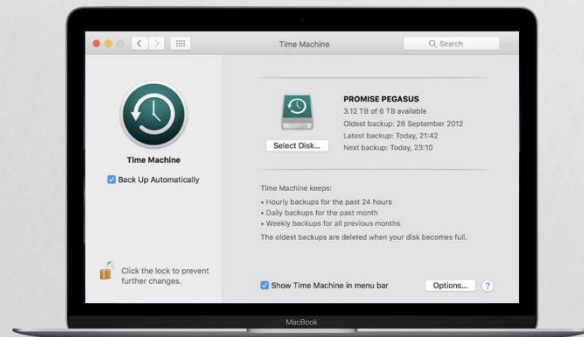
Time Machine
















Mac's exclusive backup software Time Machine

Time Machine provides

- Comprehensive backup system and file levels at the same time
- Multi-version backup
- Easy and intuitive file restore or system restore
- Backup encryption



Comparison of storage devices for Time Machine

	Mac Local	External Storage	Time Capsule	QNAP NAS
				
Storage Capacity	Fixed	Fixed	Fixed	Expand on demand 
Storage Protection	NA	Lower - RAID	NA	Higher - RAID - Snapshot - Hybrid Backup Sync 
Data access speed	Faster 	USB: Slower Thunderbolt: Faster 	1GbE: Slower	10GbE: Faster Thunderbolt3: Faster  
Supports multiple users	NA	NA	Supported 	Supported 
Backup space management	NA	NA	NA	Supported 

QNAP NAS makes Time Machine backup more complete

**Efficient
Backup & Restore**

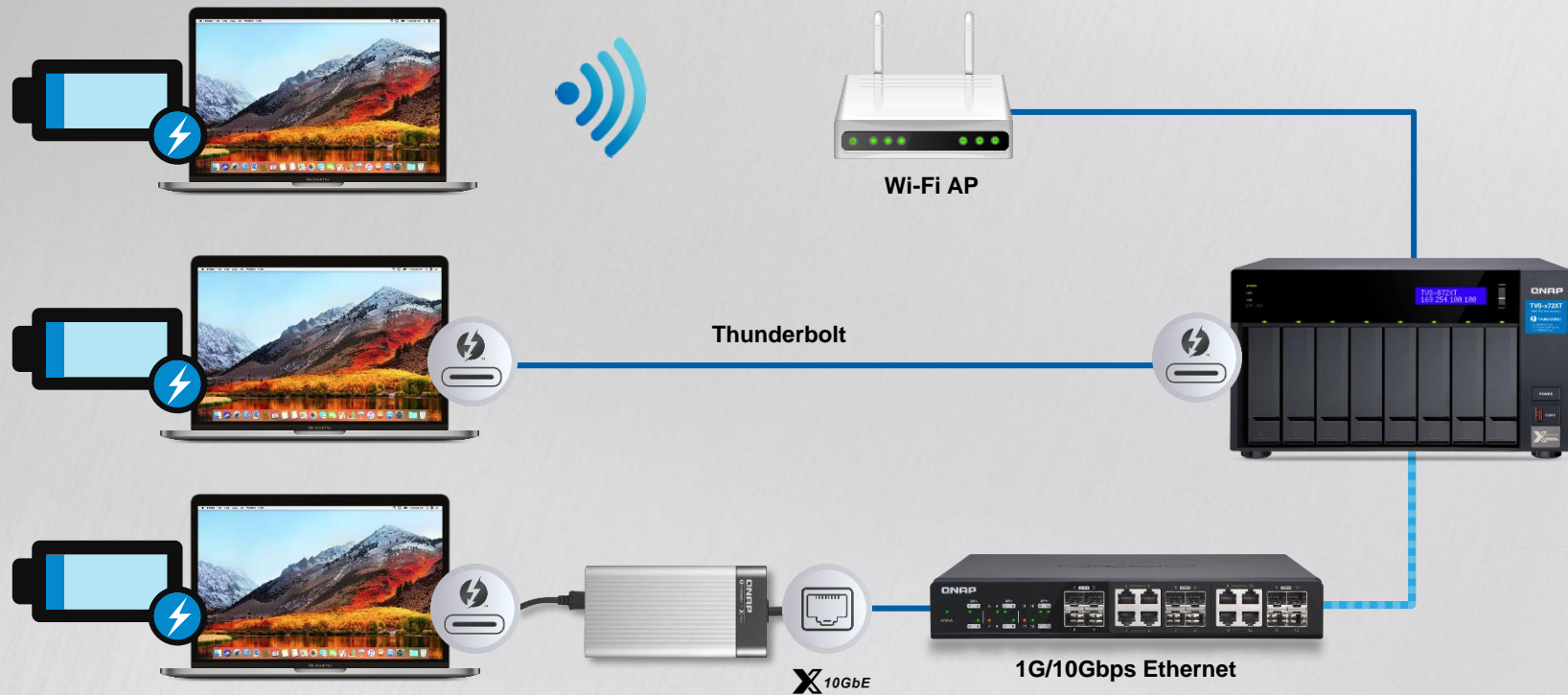
**Scalable
Storage Capacity**



**Complete Data
Protection**

**Simple Backup
Management**

How to connect Mac to QNAP NAS



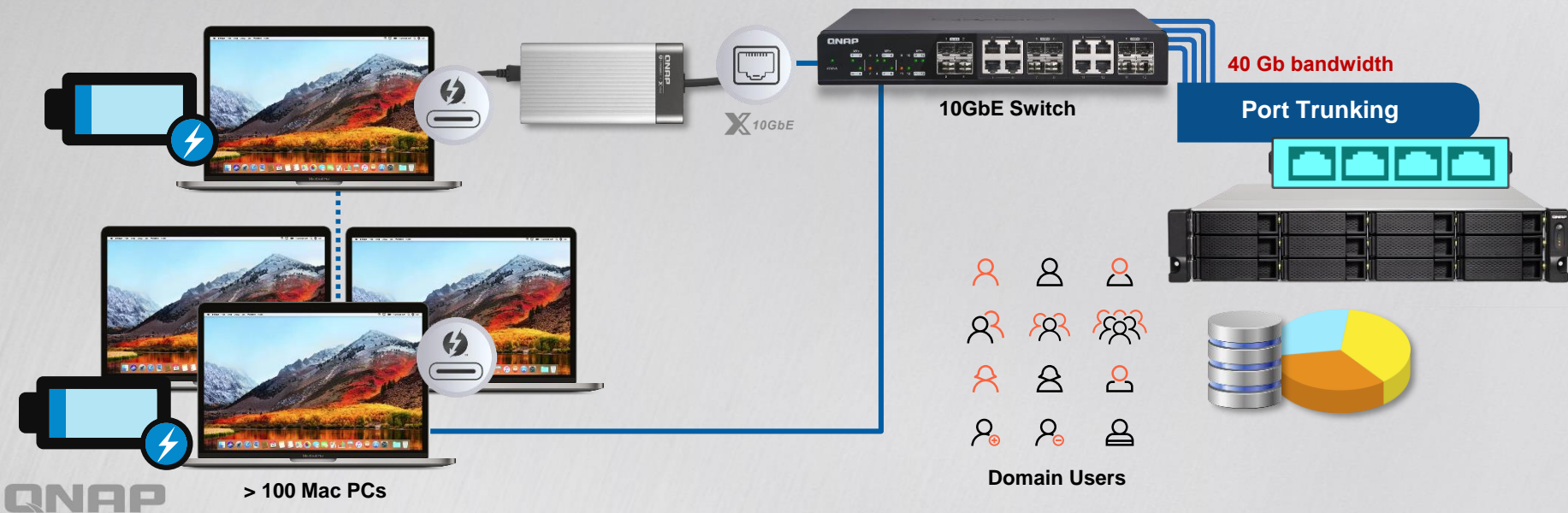
Mac backup solution for enterprises

- Backup space quota allocation for multiple users
- High-speed transmission interface and technology

- Suitable for different network segments
How to backup via SMB across network segments?

```
$ sudo tmutil setdestination smb://{USER_NAME}:{PASSWORD}@{NAS_IPADDRESS}/{SHARED_FOLDER_NAME}
```

- Centralized storage management, easy to back up again



How to prepare the NAS

1. Set up Account

2. Backup Space Management

3. Set up the Shared Folder

The screenshot displays the QNAP ControlPanel interface. On the left, a sidebar lists various system settings: System, Users, User Groups, Shared Folders, Quota, Domain Security, Domain Controller, Network & File Services, and Applications. The 'Shared Folders' option is selected. The main area shows the 'Edit Properties' dialog for a specific shared folder. This dialog has several tabs, and the 'Time Machine' tab is active. It contains a list of checkboxes for Time Machine settings. The checkbox 'Set this folder as the Time Machine backup folder (macOS)' is checked and highlighted with a red rectangular box. Other visible options include 'Lock File (Oplocks)', 'SMB Encryption', 'Enable Windows Previous Versions', 'Enable Network Recycle Bin', 'Restrict the access of Recycle Bin to administrators only for now.', 'Enable write-only access on FTP connection', 'Only allows applications to access files using the long file name format.', 'Encrypt this folder', 'Input Password', 'Verify Password', 'Save encryption key', 'Enable access-based share enumeration (ABSE)', and 'Enable access-based enumeration (ABE)'. At the bottom of the dialog are buttons for 'Migrate to Snapshot Shared Folder', 'OK', and 'Cancel'. A search bar and a list of actions are visible on the right side of the ControlPanel interface.

ControlPanel

System Users User Groups Shared Folders Quota Domain Security Domain Controller Network & File Services Applications

Edit Properties

- ☒ Lock File (Oplocks)
- ☐ SMB Encryption
- ☒ Enable Windows Previous Versions
- ☒ Enable Network Recycle Bin
- ☐ Restrict the access of Recycle Bin to administrators only for now.
- ☐ Enable write-only access on FTP connection
- ☐ Only allows applications to access files using the long file name format.
- ☐ Encrypt this folder
 - Input Password
 - Verify Password
 - ☐ Save encryption key
- ☐ Enable access-based share enumeration (ABSE)
- ☐ Enable access-based enumeration (ABE)
- ☒ Set this folder as the Time Machine backup folder (macOS)

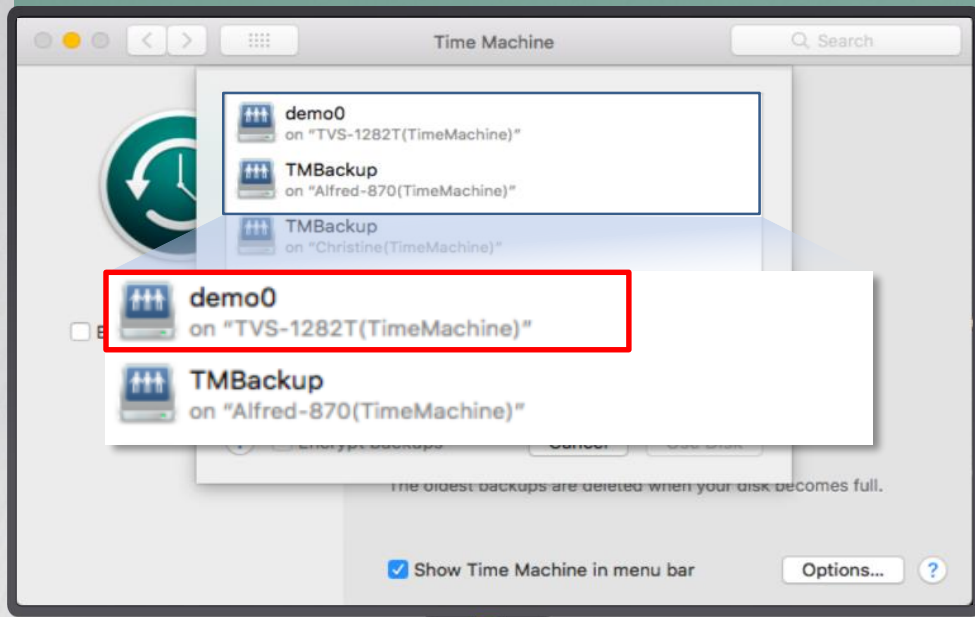
Migrate to Snapshot Shared Folder OK Cancel

Play Item: 11-20, Total: 20 Show 10 Item(s)

How to set up on Mac

1. Select Disk for Time Machine backup

2. Set up file exclusion rules



View the Time Machine backup

The screenshot displays the QNAP File Station 5 web interface. The left sidebar shows a file tree with the following structure:

- TVS-1282T
 - DataVol1
 - Download
 - home
 - homes
 - Macbookbackup
 - Multimedia
 - Public

The main content area shows a table of files within the 'richard_macbackup' directory. A red box highlights the file 'richardli的 MacBook Air.sparsebundle'.

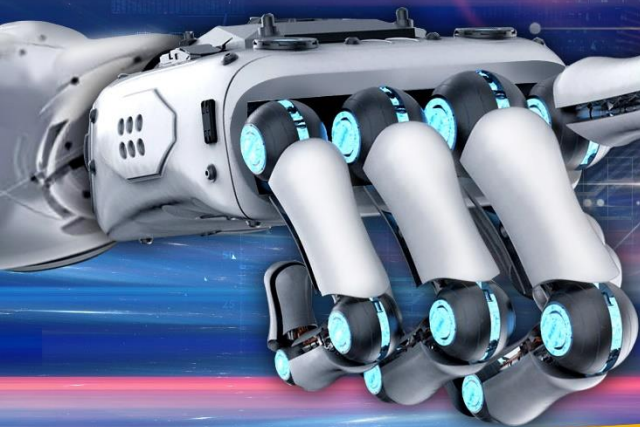
<input type="checkbox"/>	Name	Modified Date	Type	Size	Permission	Owner	Group
<input type="checkbox"/>	richardli的 MacBook Air.sparsebundle	2018/10/15 09:58:15	Folder		770 (rwxrwx--)	richard_tm	ev
<input type="checkbox"/>	@Recycle	2018/10/12 21:44:52	Folder		777 (rwxrwxrwx)	admin	ad

The bottom status bar indicates: Page 1 / 1, Display item: 1-2, Total: 2, Show 250 Item(s).

Timeline brings your file back to life



QNAP



LIVE 

DEMO



Fluent network traffic with high-speed transmission interface

- QNAP NAS provides

- ✓ 10GbE
- ✓ Thunderbolt 3

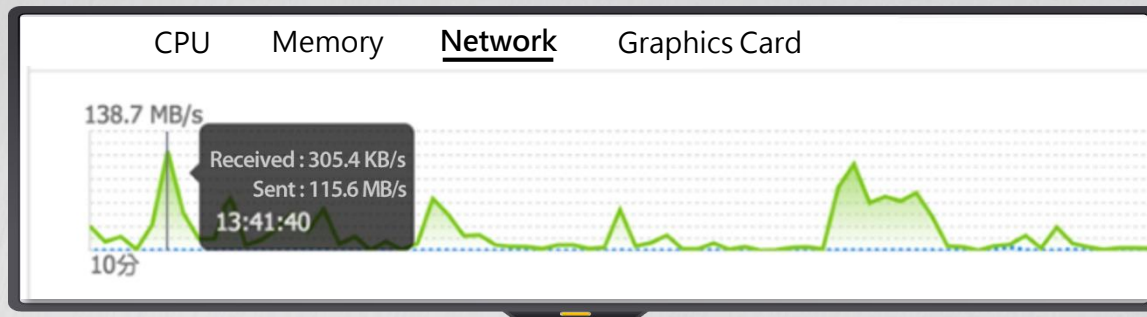


Thunderbolt



X 10GbE

- Release more bandwidth for work while Time Machine runs



A stylized clock face with a digital display. The clock face is circular with a dark background and features several gears of different sizes and colors (yellow, orange, and red) interlocking. The clock hands are white and have a modern, minimalist design. The digital display at the top shows the time 10:10. The overall aesthetic is futuristic and technological.

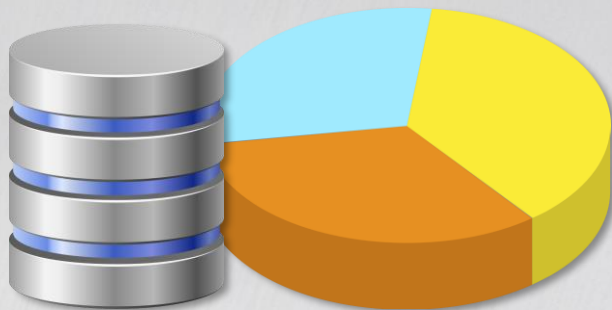
-
- A circular collage of digital security icons. At the center is a green shield with a dark blue base and the text "Data protection" in white. Surrounding the shield are various icons: a white cloud at the top, a magnifying glass over a document with "abc" on the left, a smartphone with a face lock on the right, a red padlock on a folder at the bottom right, a globe at the bottom right, a stack of server racks at the bottom left, a key on a document at the bottom left, and a speech bubble on the left. There are also icons for file formats: "doc" (blue), "pdf" (red), and "mp3" (blue). The background features a circular pattern of dashed lines and binary code (0s and 1s) at the top and bottom.



Simple Backup Management



- Support the dedicated Time Machine account
- Support multiple accounts
- Set up the quota of backup space for each user
- View the storage space



High scalability of storage space

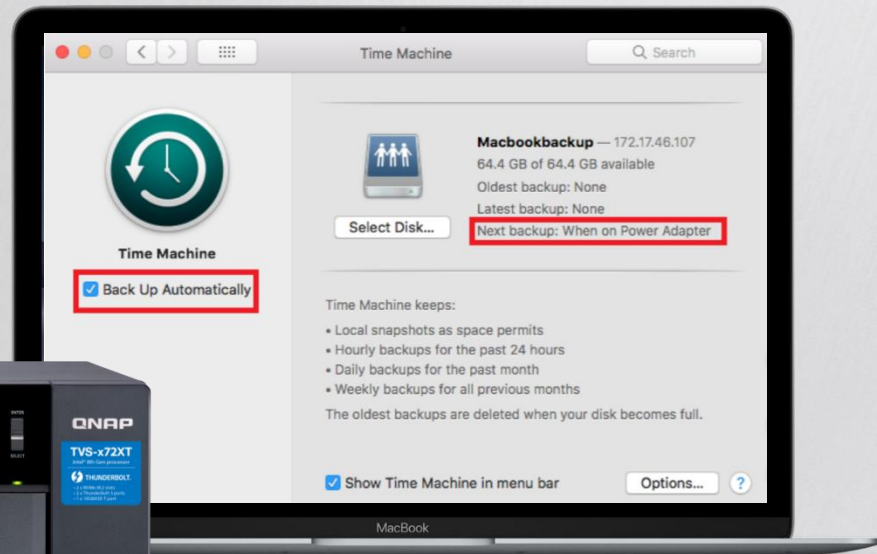
- Multi-bay models for expanding the number of disks
- VJBOD (Virtual JBOD) allows usage of storage resources of other QNAP NAS
- External hard drive with USB 3.0
- Expansion enclosures from QNAP



QNAP NAS makes automatic backup easy

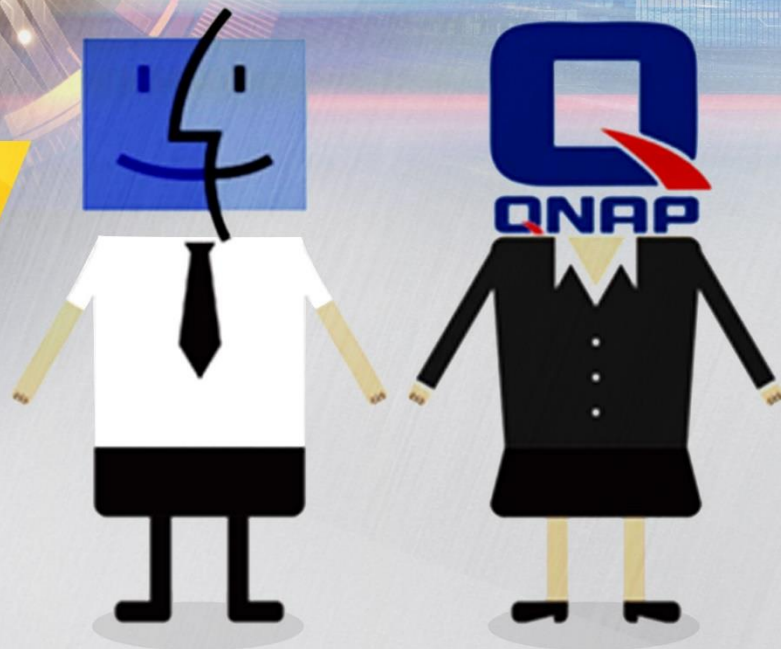
Automatic backup lets you set-it-and-forget-it

- Easy setup
- Plug and backup
- Keep backup versions automatically





QNAP NAS is the best partner of Time Machine



QNAP