

**QNAP**

3-bay NAS with 3 built-in M.2 SSD SATA ports , supporting RAID 5 data protection

# Introducing the **TS-332X**



**QNAP x Annapurna Labs**  
New AL-324 64-bit 4-core NAS



**TS-332X-2G / TS-332X-4G**

# New 3-bay NAS joins AL family



**NEW**



**TS-332X**

**Supports M.2  
SATA SSD**

\*M.2 SSD sold separately



**RAID 5 NAS**  
**1 x 10GbE SFP+**



**TS-832X**

**Dual PCIe slots**  
**2 x 10GbE SFP+**



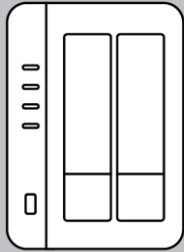
**TS-932X**

**Hybrid 5+4 drive  
configuration**  
**2 x 10GbE SFP+**

# Cost effectively secures data with RAID5



2-Bay NAS



**RAID 1:**

Space: 1 x HDD

HDD utilization: 50%



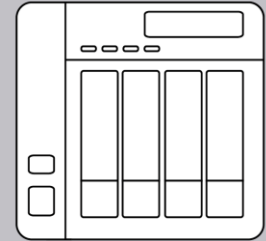
**RAID 5:**

Space: 2 x HDD

HDD utilization: **67%**



4-Bay NAS



**RAID 5:**

Space: 3 x HDD

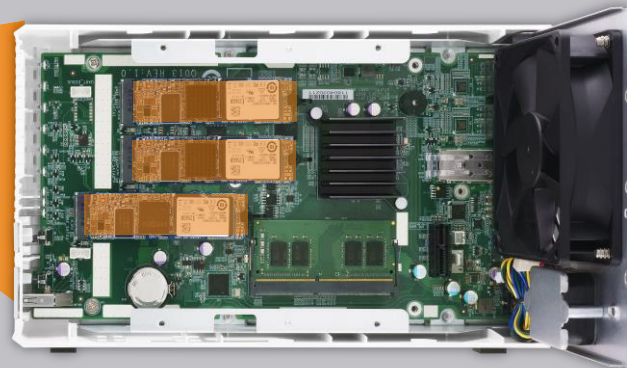
Budget concern

# Compact NAS with 3 x M.2 SATA slots



**Optimized  
design**

**3 x SATA 6Gb/s 2280  
M.2 SATA SSD slots**





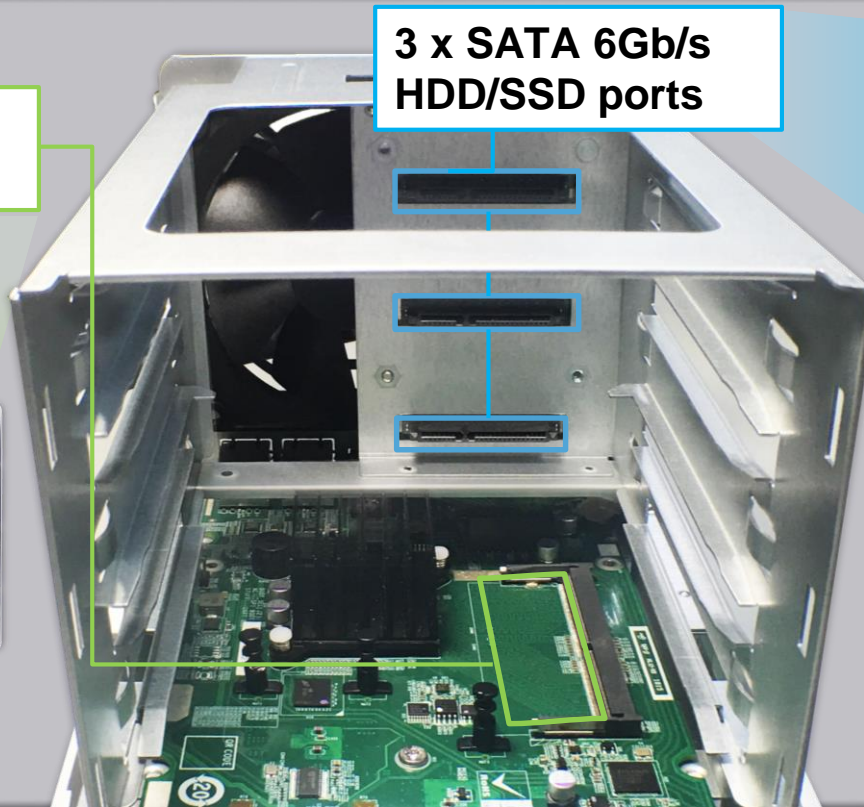
# User upgradable DDR4 RAM



DDR4 SO-DIMM, Up  
to 16GB DDR4



3 x SATA 6Gb/s  
HDD/SSD ports



# SSD support for cache acceleration



## Scenario 1

1 x SSD for cache  
2 x HDD, RAID 1

Better  
performance  
Data protection



One 2.5" tray base is bundled

## Scenario 2

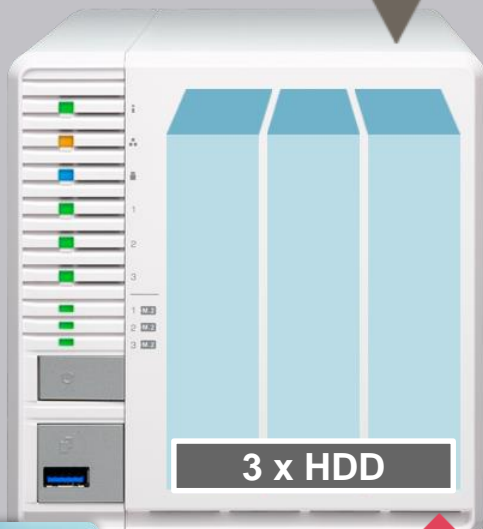
3 x HDD, RAID 5

Big storage  
Data protection

# Both performance and capacity in hand



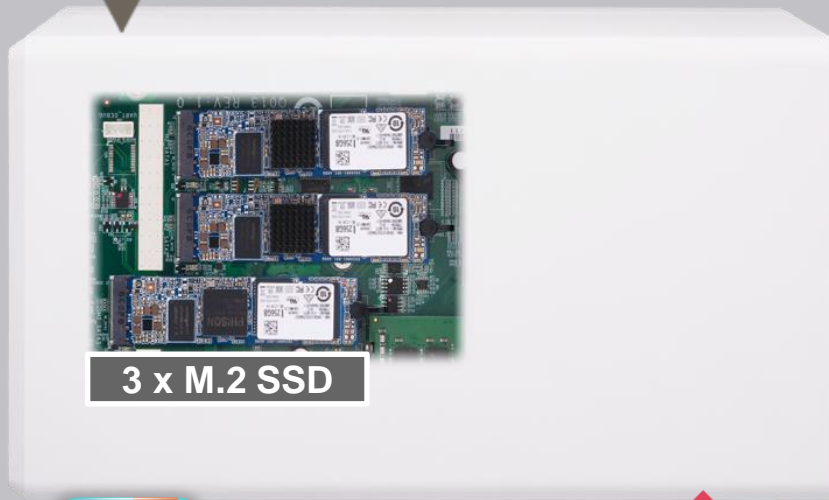
**RAID 5 X RAID 5**



3 x HDD



Cold data on big  
storage space

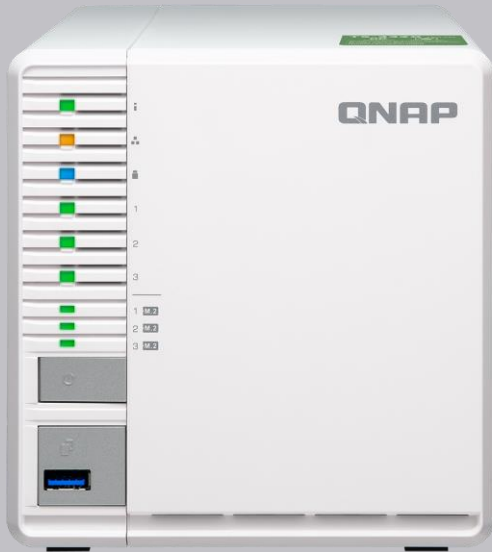


3 x M.2 SSD



Use **Qtier** for hot data  
tiered storage

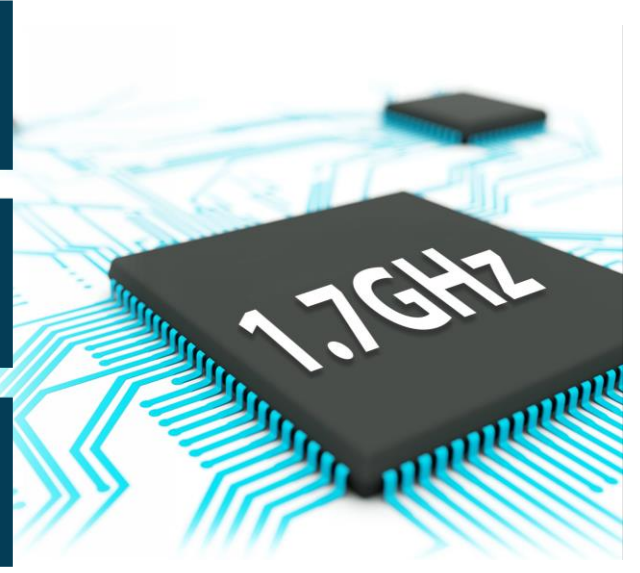
# Quad-core 64-bit Cortex-A57 CPU



**AL324 4-core  
64-bit 1.7 GHz CPU**

**Hardware Encryption  
Acceleration Engine**

**Up to 16 GB DDR4  
SO-DIMM**





# Built-in single 10GbE SFP+ port



Fully support 10GbE high-speed networks, delivering a major speed increase for virtualization tasks, fast backup & restoration, and large-data applications.

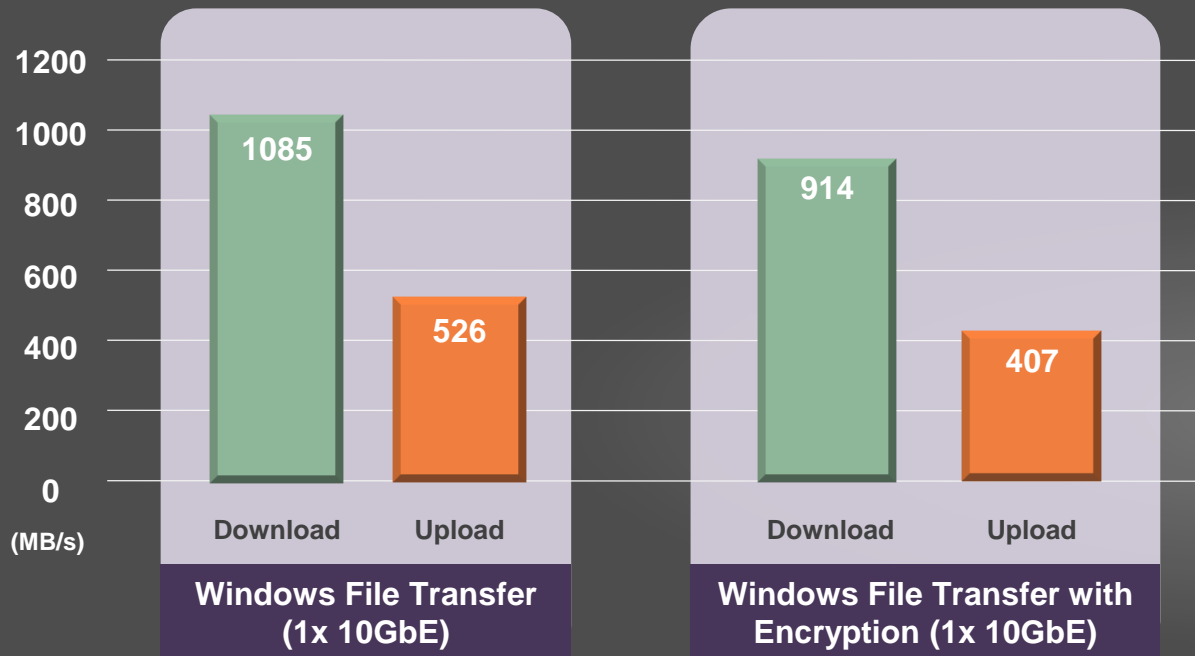


QSW-1208-8C



QSW-804-4C

# High speed Transfer



A 3D bar chart with two bars, one green and one orange, both pointing upwards. The green bar is taller than the orange bar. The chart is set against a background of diagonal lines.

Test environment :  
NAS: TS-332X  
OS: QTS 4.3.4  
RAID Group : RAID 5; 3 x INTEL SSDSC2BB240G4 240GB \*3 ;  
Plint PC : Windows 10, intel i7-5820K @3.3GHZ, 32GB RAM

\*Tested in QNAP Labs. Figures may vary by environment.

**QNAP**

**Lightning fast  
transfers**

**DEMO**

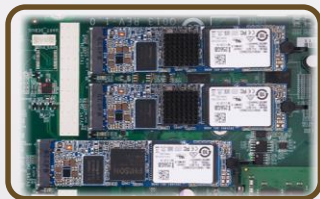


# Front view



**LED indicator: Status, LAN,  
USB, HDD1-3**

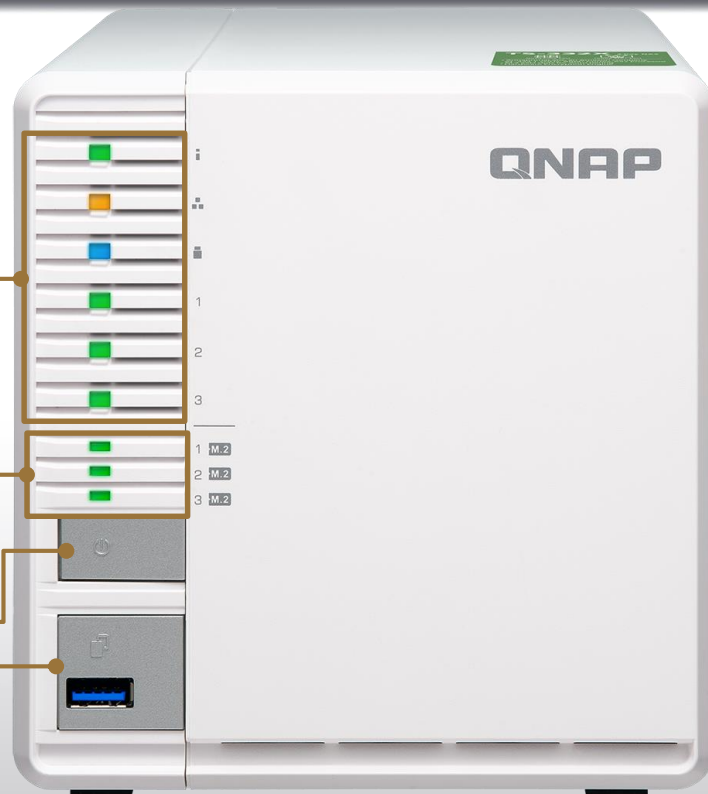
**Supports M.2 SATA  
2280 SSD**



**LED  
indicator:  
M.2 SSD 1-3**

**Power**

**USB 3.0 One Touch Copy button**

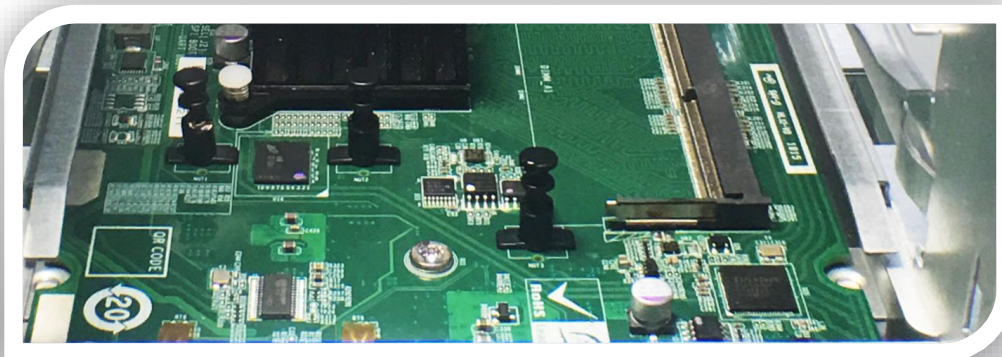
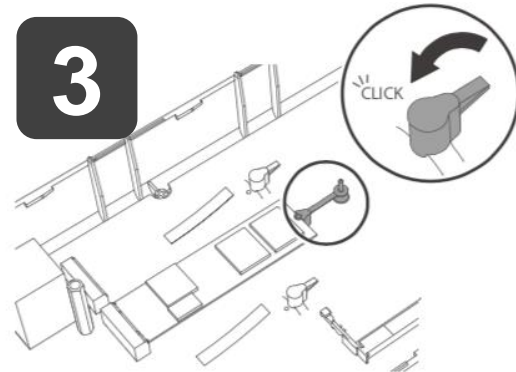
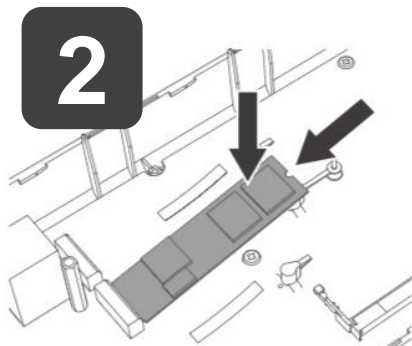
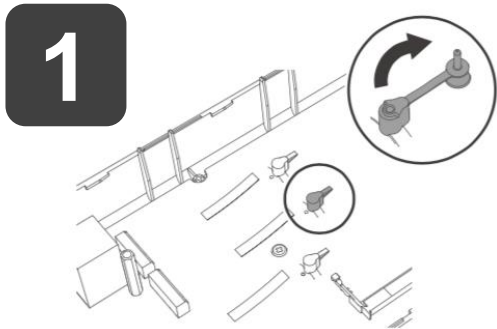


# Rear view





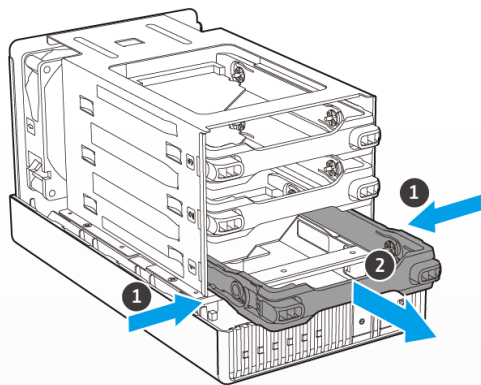
# Tool less M.2 SSD fast installation



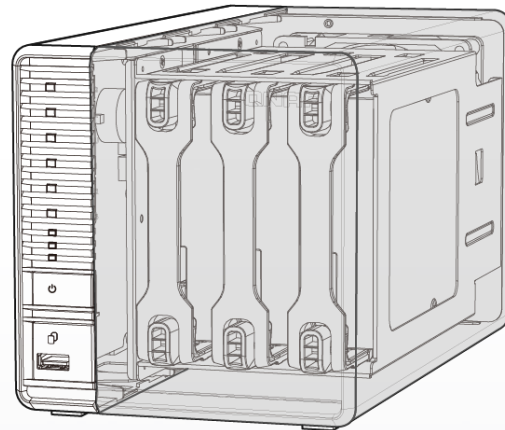
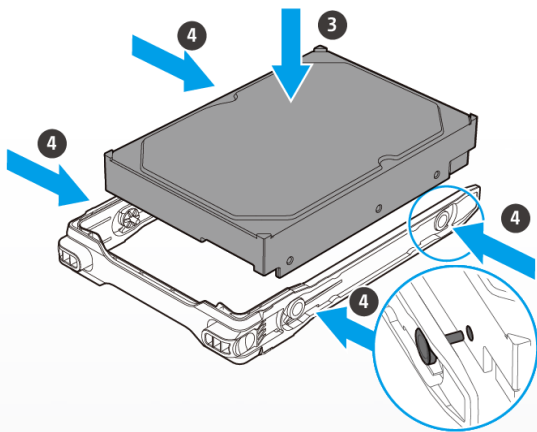
# Hot swappable and invisible slots



**Tool less installation**



**Prevent HDD mishandling  
Anti-theft**



# Elegant and energy saving



**Effective  
cooling design**



**ARM Cortex-A57 Energy  
saving architecture**

Standby: 18.56 W  
Operating: 26.22 W

**QNAP**

**Install M.2 and  
upgrade RAM**

**DEMO**



A background image showing two women in an office environment. They are smiling and looking at a document held by one of them. In the background, a man is blurred, working at a computer. The scene is brightly lit, suggesting a modern office.

# Data Backup

Snapshot provides a complete  
data backup solution

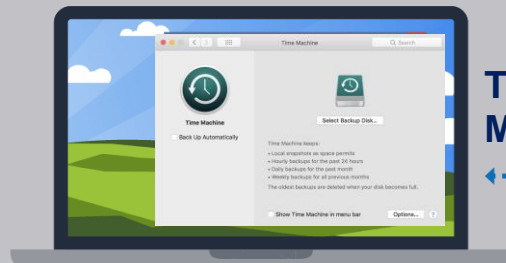


# A complete backup solution



Data backup is the most effective way against ransomware

macOS



Time  
Machine



Windows



NetBak  
Replicator



Real-time or  
scheduled back up to  
the TS-332X easily.

# Protect your backup with QNAP Snapshot



For the  
whole NAS

For a single  
volume/LUN

2 GB  
RAM

$\geq$  4 GB  
RAM

64

256

32

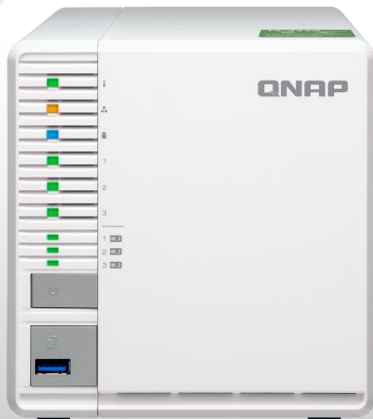
64

FileStation 5

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<input type="checkbox"/>	GMT+08_2017-09-06_0908	2017/09/02 09:56:20	Folder	
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Page 1 / 3 | Display item: 1-50, Total: 149 | Show 50 | Item(s)

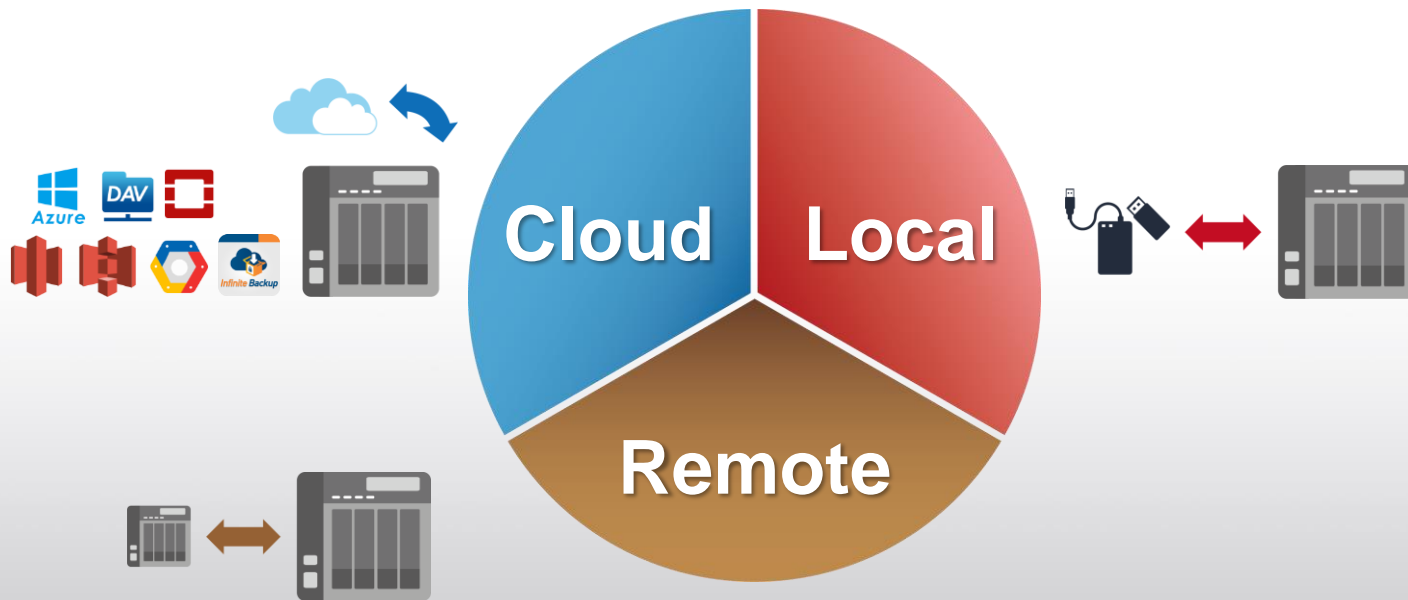
The best  
choice for  
backup



# Multi-layer protection for the backup



## Hybrid Backup Sync



# Data management

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**Qsirch**

Full text search



**Qfiling**

Smart filing

# QNAP meets all needs for an office



File Station



OCR Converter



Qsirch



Qfiling



Store and backup

File Digitization

Search

Archive



With OCR Converter, Qsirch can search for image context.





# Qsirch 334 core competencies



## 3

### Search tools

- ♦ **Advanced search** for complex keyword search
- ♦ **Category bar** for quickly finding every kinds of files
- ♦ 35+ powerful filter **conditions**

## 3

### Search aids

- ♦ **Tags** for every search criteria
- ♦ **Highlight keywords** for viewing the search result clearly
- ♦ Easy steps from preview to sharing

## 4

### Search channels

- ♦ Web
- ♦ Browser extension
- ♦ Mobile app
- ♦ Mac Finder \*

\* This feature is going to be supported from QTS4.3.5



# Qfiling 2.0 core competencies



## Flexible

Create your Qfiling rules  
in 3 steps



## Efficient

Scheduling for auto filing



## Total control

With system logs, filing status  
is easily accessible



## Fast

With recipes, tasks are done  
with one click

# Note Station 3

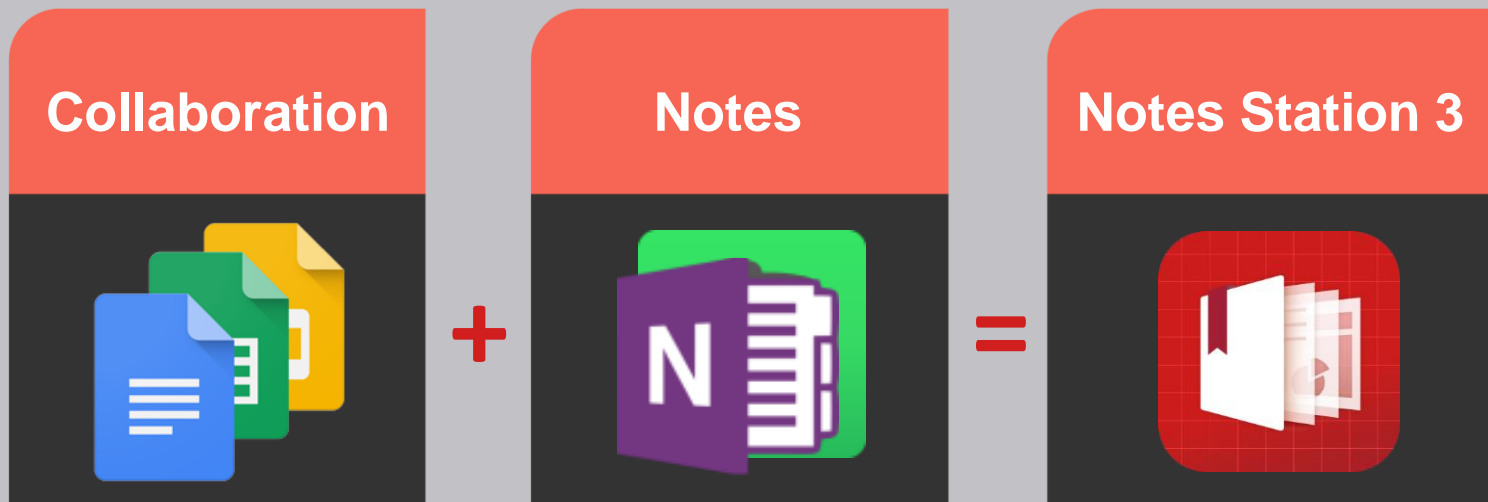
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A convenient Notepad on  
your Private Cloud

# What is Notes Station 3?



Notes Station 3 is a note taking app on private cloud with powerful functions for collaboration. It's like having collaborative editing of Google Docs and the note-taking of Evernote all at the same time.



# Efficiently plan your self-guided tour with Notes Station 3



———— Four major functions, get it once! ————

01

Notes Taking

02

Notes Sharing

03

Notes Management

04

Security and Backup



# Efficiently plan your self-guided tour with Notes Station 3



## Notes Taking

- **Notes taking** | Notes Station 3 helps you create a perfect journey plan
- **Image Editor** | Mark on the map to make attraction locations visible at a glance
- **Snapshot management** | Don't worry about messing up the note, snapshots help you restore to original version

## Notes Sharing

- **Share** | Too difficult to plan alone? Start planning journey with friends together
- **Collaboration** | Multiple users co-edit in real time, work together to increase your work efficiency
- **Share management** | Easily manage many shared notes at one time

## Notes Management

- **Tagging** | Define your own tags to categorize and quickly find notes you want
- **Important notes** | Add your schedule as favorite to quickly access your plan

## Security and Backup

- **Password protection** | Add password for notes to protect your privacy
- **Import/Export** | Export your plan and easily carry around in journey

# Surveillance Solution

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Secure your environment

# QVR Pro surveillance solution



**5,000+ compatible IP cameras**

**8 free IP camera channels**

**16 max. IP camera channels**

**QUSBCam2 record from USB webcams**

# TS-332X provides you...



## M.2 supported RAID5 NAS

- Improve the HDD usage
- Use SSD for cache or M.2 for auto tiering



## VJBOD and surveillance

- support VJBOD to arrange available capacity efficiently
- support QVR Pro



## Built in 10GbE SFP+

- High speed transfer enhances the productivity
- Building 10GbE workflow with QSW by very low cost



## Data safety

- Snapshot protection
- Time Machine and Netback Replicator backup solution
- Cloud service







# TS-332X

is your best choice

