8/12/16-bay Rackmount NAS Series

AMD Ryzen™ V1500B 4C8T 2.2GHz rackmount NAS with 2.5GbE and optional 10GbE for hybrid cloud

TS-1273AU-RP

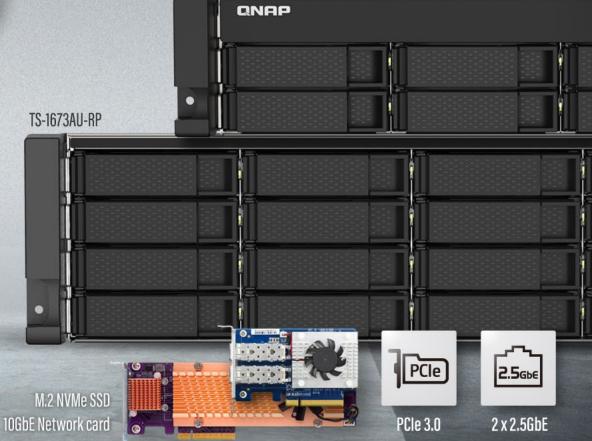


AMD



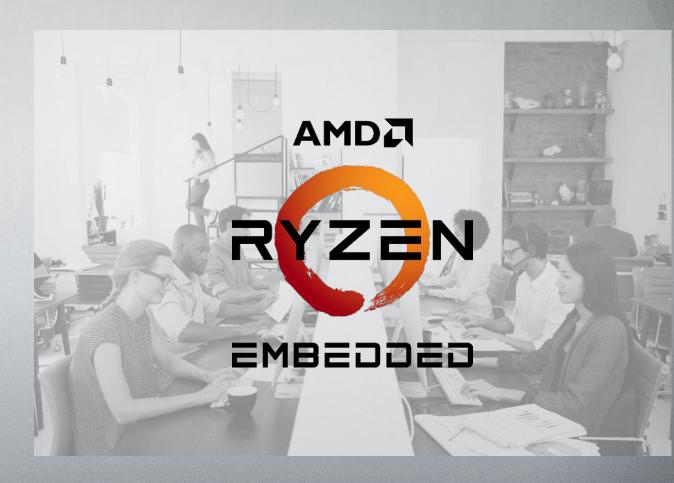
V1000 series V1500B SoC processor QNAP

TS-873AU / TS-873AU-RP



# The new cost-effective NAS for SMBs with an all-new Ryzen processor

- Reduced IT budget, congested network and increased number of connected devices are the challenges for businesses.
- 8/12/16-bay TS-x73AU with brand new highperformance Ryzen V1500B 4C/8T 2.2 GHz processor, dual 2.5GbE ports and PCIe Gen3 slots.
- QTS 4.4.2 business applications tunnel a productive workflow.



### How businesses can make the most effective IT investments in 2020 during and after the COVID-19 crisis?

- "Worldwide IT spending is now expected to decline 2.7% in constant currency terms this year as COVID-19 impacts the global economy and forces many organizations around the world to respond with contingency planning and spending cuts in the short term.... hospitality and tourismheavy industries like transportation and personal and consumer services are expected to be the most negatively impacted markets with IT spending expected to decline by 5% or more." IDC
- More and more connected devices in offices or via VPN result in more congested networks.



### With the same LAN cable, 2.5GbE switch for multi-device environment





QSW-1208-8C (unmanaged)

8 x 10G/5G/2.5G RJ45 Multi-Gig



QSW-M408-4C (managed)

4 x 10G/5G/2.5G RJ45 Multi-Gig



QSW-308-1C (unmanaged)

1 x 10G/5G/2.5G RJ45 Multi-Gig



QSW-M408-2C (managed)

2 x 10G/5G/2.5G RJ45 Multi-Gig Use the existing wiring infrastructure to support 2.5GbE

	CAT 5e	CAT 6	CAT 6A
100M	<b>~</b>	<b>✓</b>	<b>✓</b>
1G	<b>~</b>	<b>✓</b>	<b>~</b>
2.5G	<b>~</b>	<b>✓</b>	✓
5G	<b>~</b>	<b>✓</b>	<b>✓</b>
10G	X	<b>✓</b> (55m)	<b>✓</b>

#### Affordable TS-x73AU NAS with Ryzen: the new CPU is 2 levels higher than the preceding R-series (for TS-x73U)!

AMDA

RYZEN

In 2020 businesses should spend their IT budget in the most cost-effective way. QNAP is launching the very competitive 8/12/16-bay TS-x73AU NAS with an all-new Ryzen-class processor.







QNAP

# TS-X3-

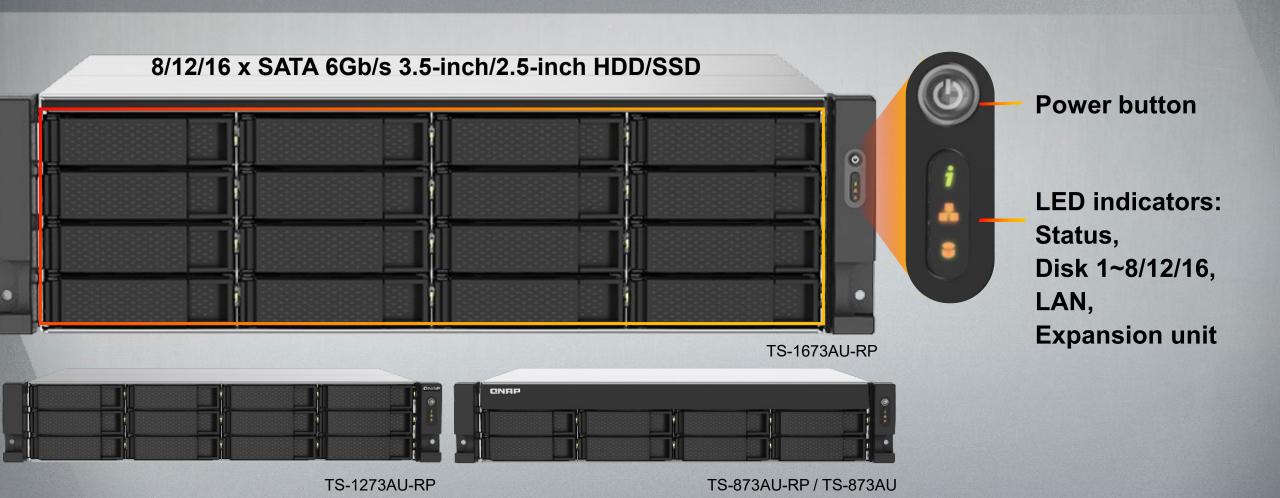
8/12/16-bay Rackmount NAS Series

Hardware

### Performance-driven, AMD long-term supported embedded V1500B 4C8T 2.2 GHz processor w/ 25W TDP only

NEW	TS-x73AU series	TS-x73U series	QNAP
Processor	V1500B	RX-421ND	
Cores	4	4	
Threads	8	4	
Base frequency	2.2 GHz	2.1 GHz	
Boost frequency		3.4 GHz	
L2 cache	2MB	2MB	
L3 cache	4 MB		
Memory	DDR4	DDR4	AMD
TDP	12 ~ 25 W	12 ~ 35W	RYZEN
CPU architecture	Zen	Excavator	

### 8/12/16-bay TS-x73AU front views



### 4/8/16 GB system memory and upgradeable to dual-channel 32 GB for more apps and clients

#### **NAS SKUs**

**TS-873AU-4G** 4 GB RAM (1 x 4 GB)

**TS-873AU-RP-4G** 4 GB RAM (1 x 4 GB)

**TS-1273AU-RP-8G** 8 GB RAM (1 x 8 GB)

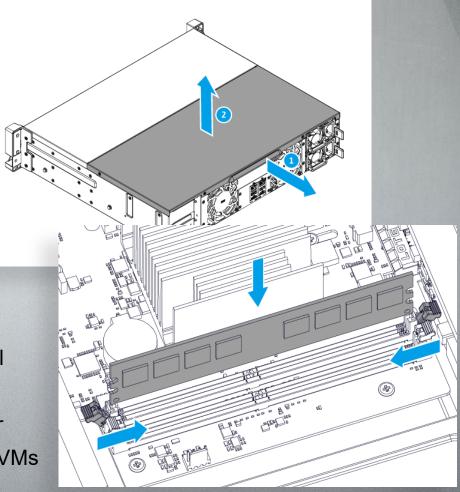
**TS-1673AU-RP-16G** 16 GB RAM (1 x 16 GB)



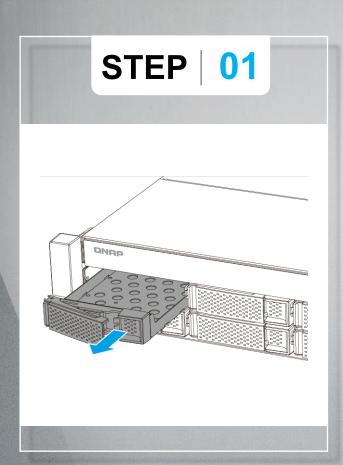
#### Dual-ch. support

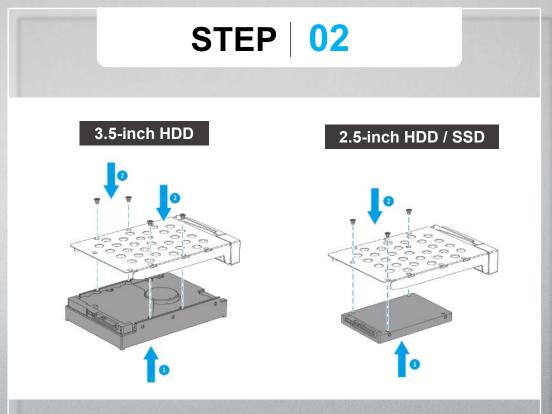
2 x DDR4 UDIMM RAM slots,
 max 32 GB (2 x 16 GB)

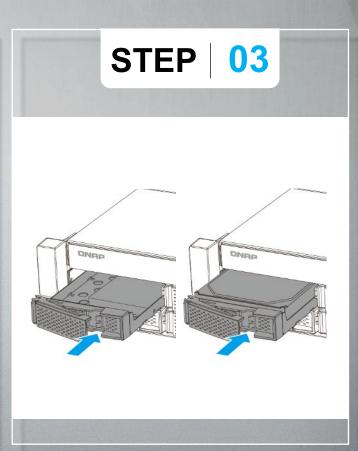
 Users can order and install additional QNAP 4/8/16 GB RAM modules to ensure the performance of multi-user connection and to run more apps or VMs



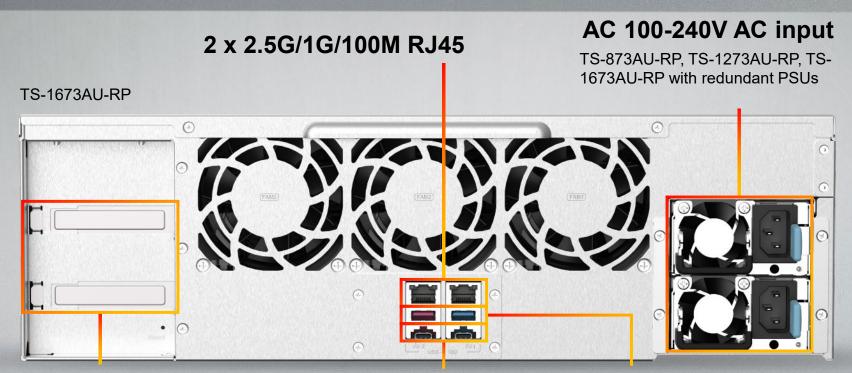
### Long-lasting metal disk trays, easy to install HDDs & SSDs







### 8/12/16-bay TS-x73AU rear views



#### PCle 3.0 (Gen3) slots

• TS-1273AU-RP & TS-1673AU-RP: shipping with 2 x PCle Gen3 x4 slots, optional bracket accessory is available for changing to 1 x PCle Gen3 x8 slot.

#### Type-C:

2 x USB 3.2 Gen 2 10Gb/s

#### Type-A:

1 x USB 3.2 Gen 2 10Gb/s + 1 x USB 3.2 Gen 1 5Gb/s

#### TS-873AU



TS-873AU-RP



**TS-1273AU-RP** 



#### TS-873AU/TS-873AU-RP:

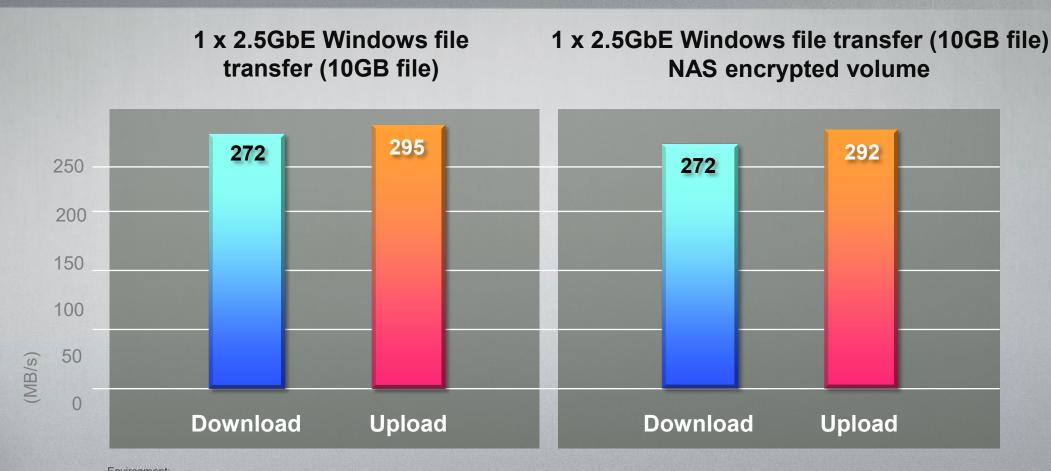
Shipping with 1 x PCIe Gen3 x8 slot, optional bracket and riser card accessories are available for changing to 2 x PCIe Gen3 x4 slots.

### Invest in higher speeds now and save more! Dual 2.5GbE TS-x73AU NAS for large file transfer and intensive access

No more bandwidth restriction by 1GbE interface on NAS! No more DIY to install the 2.5GbE driver to your NAS from other venders! TS-x73AU NAS is equipped with 2 independent 2.5GbE NICs for faster and smoother multi-device networking experience. The available PCIe expansion slot is ready for the future business growth.



### 2.5GbE accelerates large file transfer than 1GbE, especially suitable for a single client environment

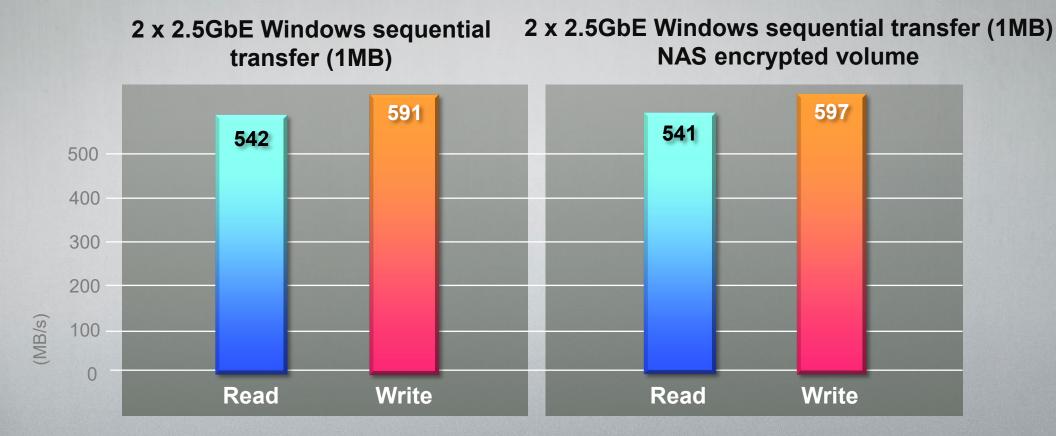


NAS | TS-1273AU-RP-8G, QTS 4.4.2, 12 x Samsung 850 Pro 512GB, RAID 5, thick volume PC | Windows 10 Pro, Intel Core i7-6700 3.4 GHz, 32GB RAM IOmeter | RAM\*4, 30-sec ramp up time, 3-min seq. run time, 2 workers, 64-outstanding, 1MB

Tested in QNAP Labs. Figures may vary by environment.

### 2 x 2.5GbE for the multi-user/device environment for the future business growth

In addition to Jumbo Frame support, port trunking (link aggregation) also provides enhanced performance.



#### PCle Gen3 slot(s) for adding more LAN ports with 5GbE & 10GbE network cards

#### **QXG-5G1T-111C**

1 x 5G/2.5G/1G/100M

#### **QXG-5G2T-111C**

2 x 5G/2.5G/1G/100M

#### QXG-5G4T-111C

4 x 5G/2.5G/1G/100M

#### QXG-10G1T

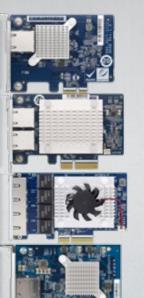
1 x 10G/5G/2.5G/1G/100M

#### QXG-10G2T-107

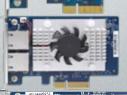
2 x 10G/5G/2.5G/1G/100M

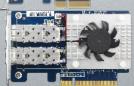
#### QXG-10G2SF-CX4

2 x 10G SFP+

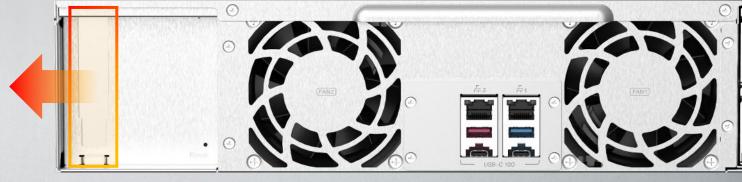




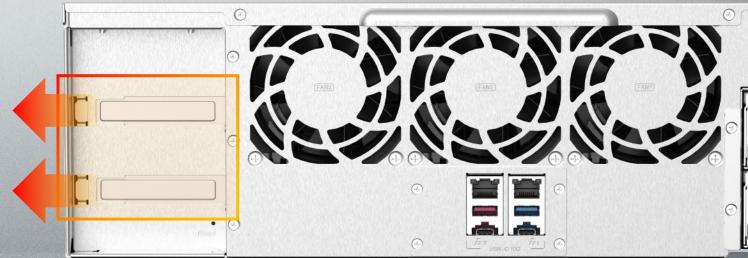




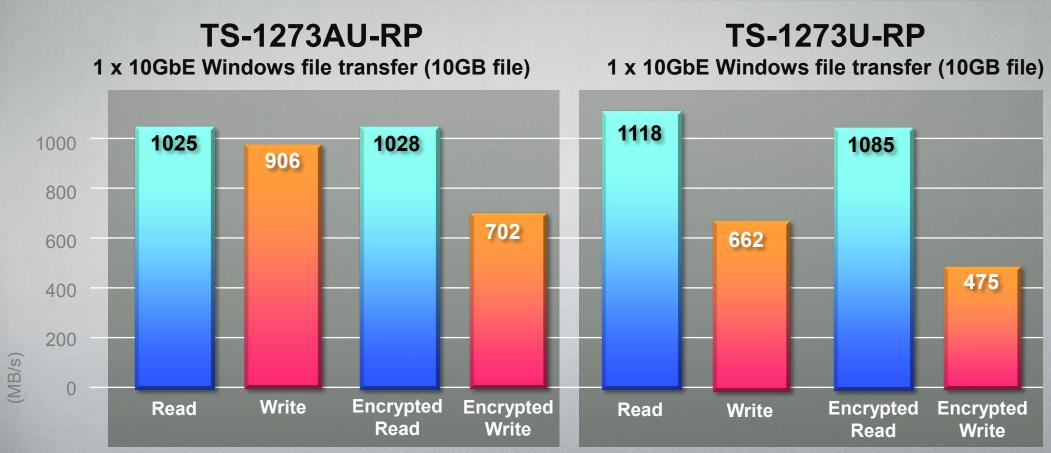
TS-873AU-RP & TS-873AU: 1 x PCle 3.0 x8 slot



TS-1273AU-RP & TS-1673AU-RP: 2 x PCle 3.0 x4 slots



### 1 x 10GbE performance: TS-x73AU write speed is 50% faster than TS-x73U



Environment:

NAS | TS-1273AU-RP-8G & TS-1273U-RP, QTS 4.4.2, 12 x Samsung 850 Pro 512GB, RAID 5, thick volume. Volume encryption.

PC | Windows 10 Pro, Intel Core i7-6700 3.4 GHz, 32GB RAM

IOmeter | RAM\*4, 30-sec ramp up time, 3-min seq. run time, 2 workers, 64-outstanding, 1MB

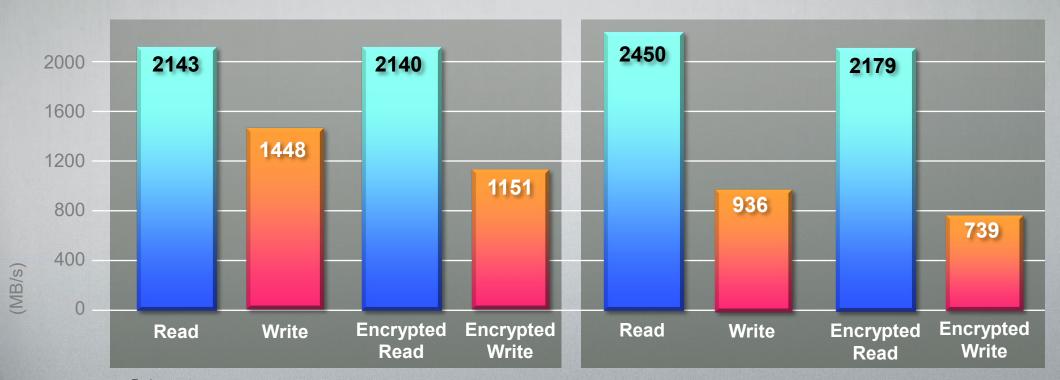
Tested in QNAP Labs. Figures may vary by environment.

### 2 x 10GbE performance: TS-x73AU write speed is 50% faster than TS-x73U

#### **TS-1273AU-RP**

#### TS-1273U-RP

2 x 10GbE Windows sequential transfer (1MB) 2 x 10GbE Windows sequential transfer (1MB)



Environment:

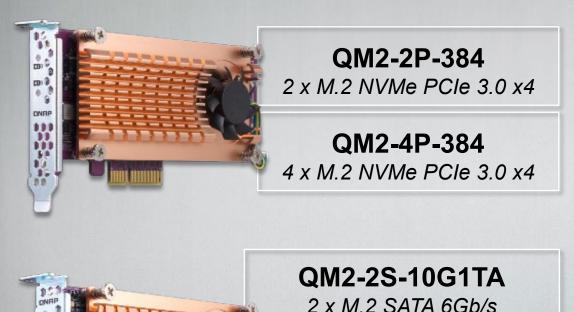
NAS | TS-1273AU-RP-8G & TS-1273U-RP, QTS 4.4.2,  $12\ x$  Samsung  $850\ Pro\ 512GB$ , RAID 5, thick volume. Volume encryption.

PC | Windows 10 Pro, Intel Core i7-6700 3.4 GHz, 32GB RAM

IOmeter | RAM\*4, 30-sec ramp up time, 3-min seq. run time, 2 workers, 64-outstanding, 1MB

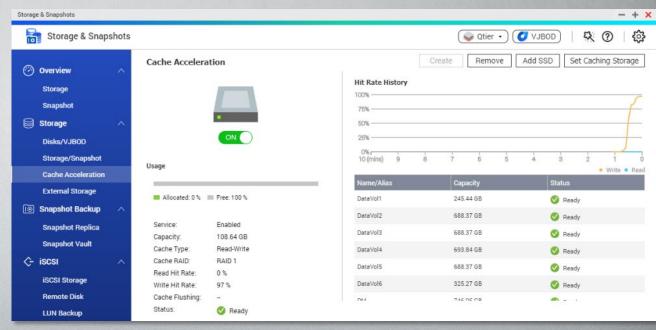
Tested in QNAP Labs. Figures may vary by environment.

# Add two M.2 SSDs with a QM2 PCle adapter and use SSD cache to enhance IOPS and performance of processing small files





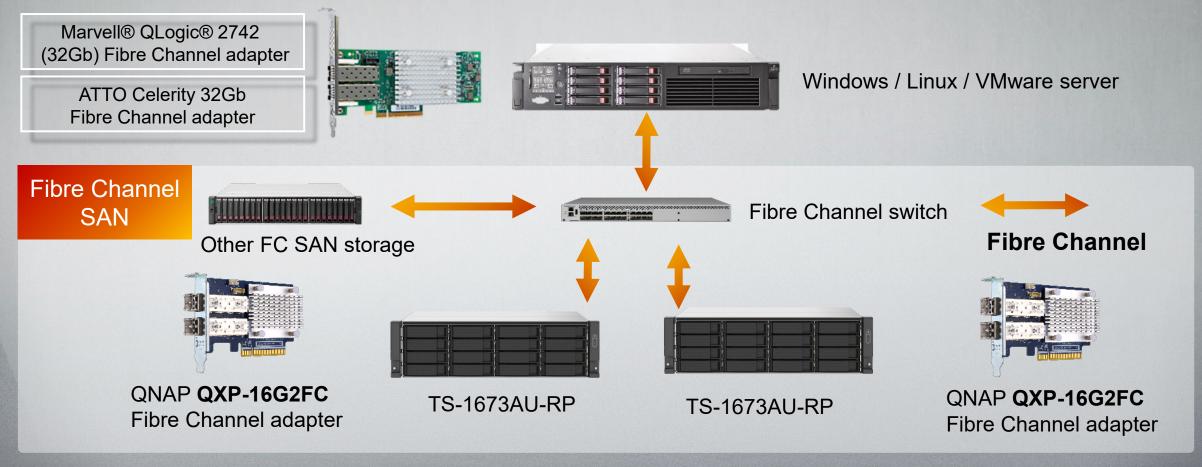
1 x 10G/5G/2.5G/1G



For more QM2 adapters https://www.qnap.com/en/product/qm2-m.2ssd

### Install a QNAP QXP-16G2FC 2-port 16GFC FC adapter to add NAS to your FC SAN storage

#### Windows / Linux / VMware host (initiator mode) + NAS (target mode):



### Various accessories to mount the NAS, protect against SSD failure, or increase the NAS storage capacity

#### RAIL-B02

Optional rail-kit that is compliant with ANSI/EIA-RS-310-D.



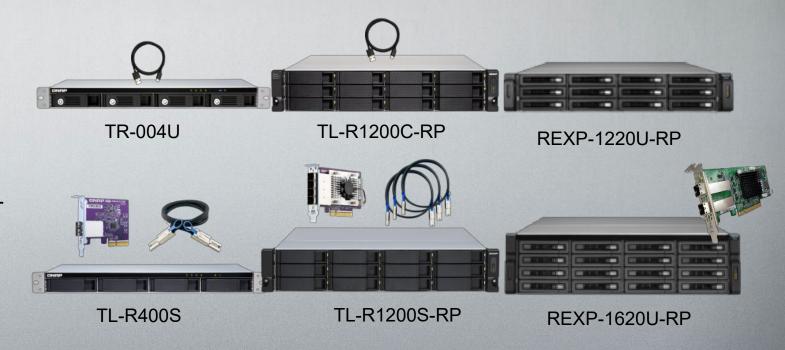
#### QDA-A2AR

2 x 2.5-inch SATA 6Gb/s to 1 x 3.5-inch SATA 6Gb/s hardware RAID 0/1 adapter



#### **Expansion enclosures**

Flexible USB, PCIe multi-ch. SATA or SAS JBOD to expand NAS capacity



# Economical and flexible QNAP expansion enclosures for multi-platform usage

QNAP TR RAID and TL JBOD enclosures have many advantages compared to the eSATA JBOD enclosures in the market for NAS capacity expansion.

#### **Bigger capacity**

- 4 & 12-bay choices
- NAS can support up to two expansion enclosures

#### **Higher speed**

USB 3.2 Gen 1 5Gb/s, USB 3.2 Gen 2 10Gb/s or up to 64Gb/s with multiple mini-SAS SFF-8088 6Gb/s cables

### Better compatibility: NAS or Windows/Linux server storage

- Expand NAS or server storage capacity or data migration between different hosts
- QNAP External RAID Manager and JBOD Manager for monitoring the JBOD status

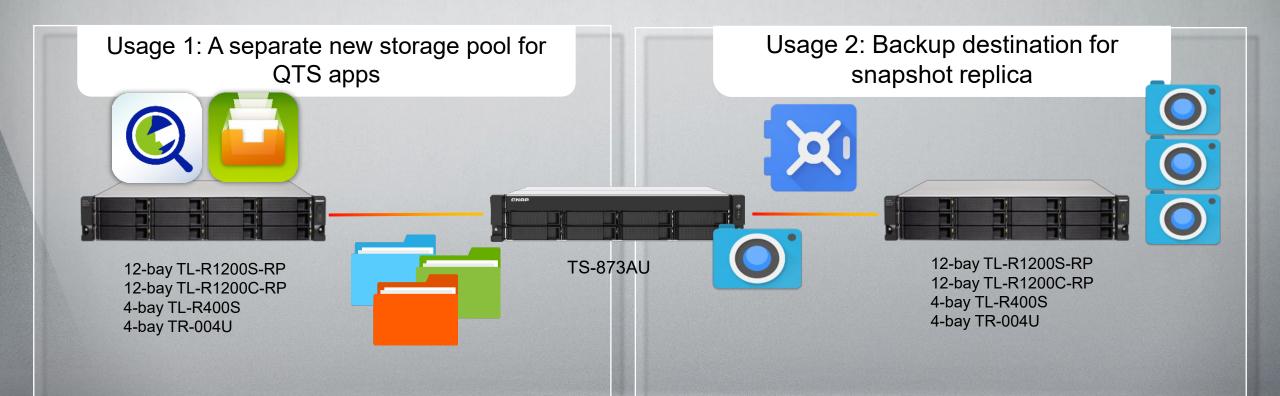




# QNAP TR & TL enclosures support several usages and modes on NAS

TS-x73AU supports up to two QNAP TR or TL expansion enclosures.

 Internal mode with storage pool support or external mode with cross-platform compatibility with Windows/Mac computers.





QNAP

# TS-X-3-1

8/12/16-bay Rackmount NAS Series

LIVE DEMO



QNAP

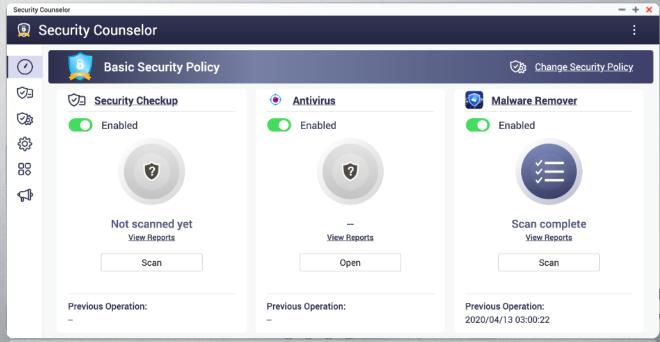
8/12/16-bay Rackmount NAS Series

QTS 4.4.2

### QTS security circle with anti-virus and malware protection to guard business digital assets



NAS is the central place for storing files from various sources, which may carry viruses, or malwares. Regular use of Antivirus app scans and cleans up the infected files, so that the virus would not infect other connected computers or servers.

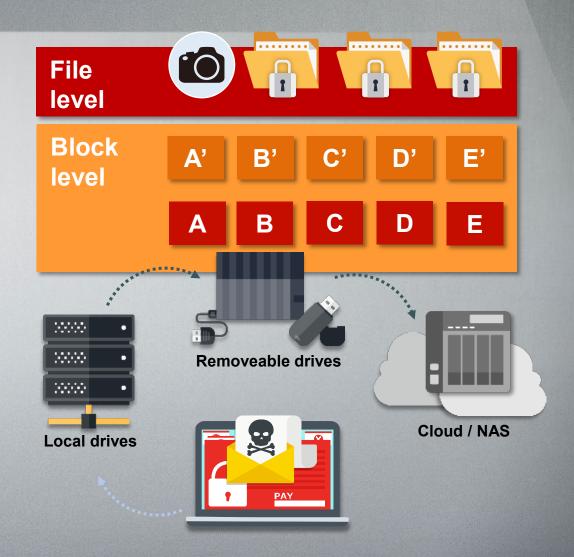


### QNAP snapshot features for file recovery, keeping business in good hands

- 1. Fully supports all storage configurations at the storage pool level.
- 2. Easily take, manage and restore snapshots.
- 3. Using the mature Ext4 file system for "out-of-volume" snapshots.

RAM <b>Size</b>	Maximum Total Snapshot Number	Maximum Snapshot Number per Volume/LUN
4GB and more	1,024	256

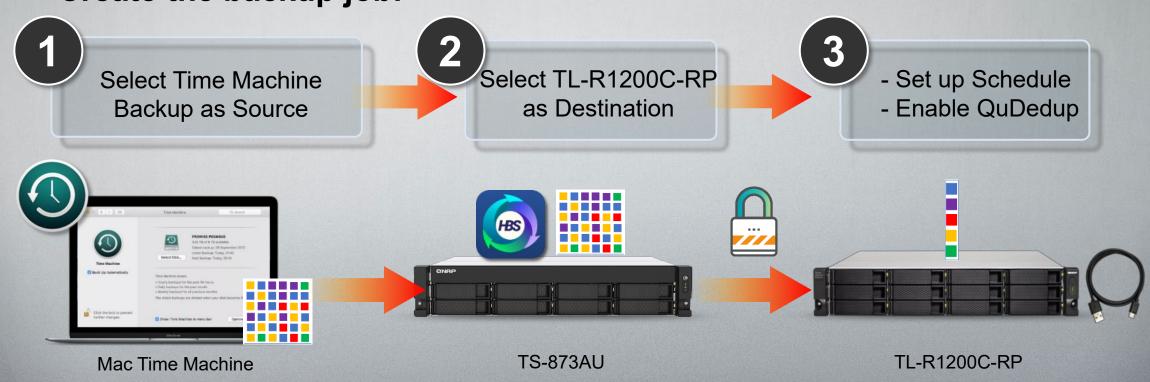
Ransomware cannot overwrite snapshots, which are stored out of volume.



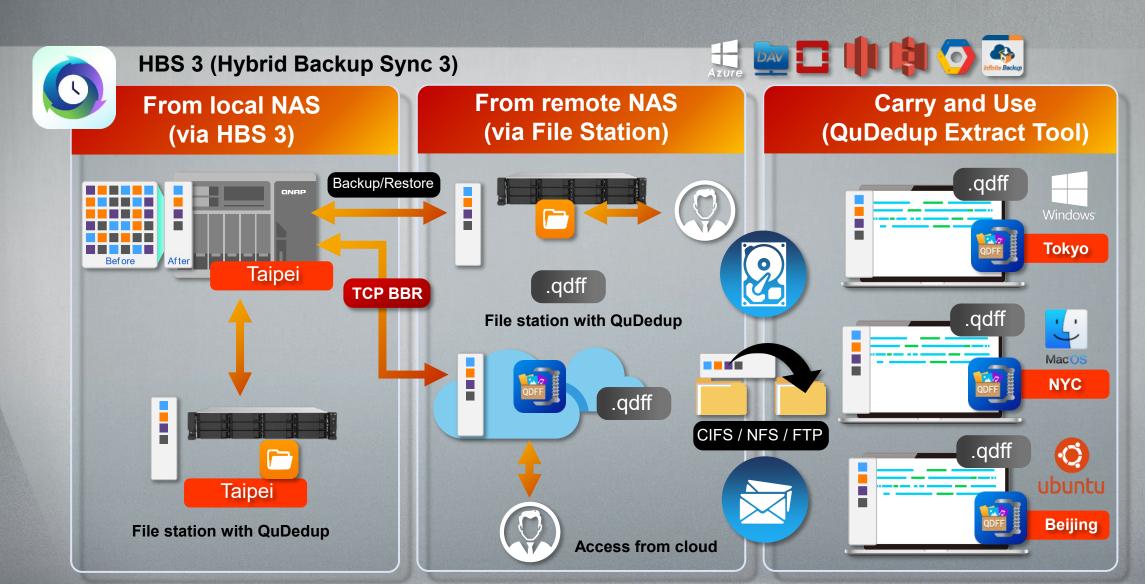
### Free macOS Time Machine backup supporting multiple users to reduce extra business expenses

Copy Time Machine Backup file to NAS via HBS 3, and then synchronize the data from NAS to an external device or the cloud, e.g. TL-R1200C-RP USB 3.2 Gen 2 JBOD

#### Create the backup job:



### Backup data with deduplication for quick disaster recovery. TS-x73AU is your private cloud!



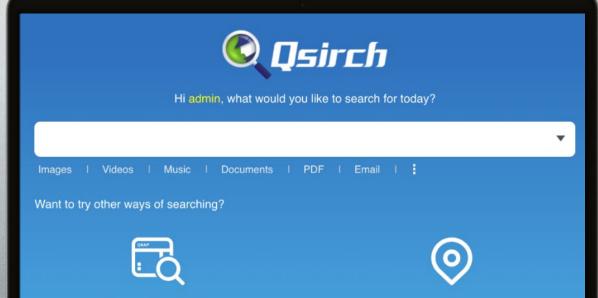
### Use the 2.5GbE/10GbE NAS & the Hyper Data Protector app to actively backup VMs for free



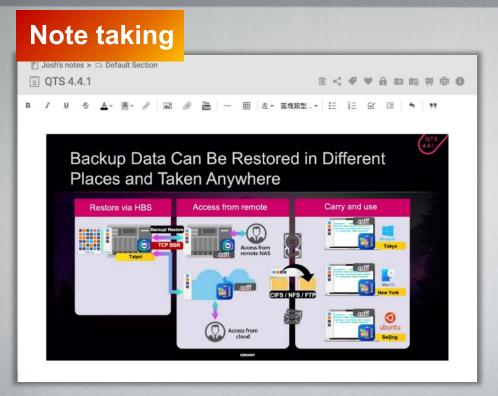
# Qsirch makes it easy to search for files and contents in various ways



- Search within NAS and on the Internet
- Large preview pane for files
- Advanced search for complex keyword search
- 35+ powerful filter conditions
- Easy steps from previewing to sharing



### Enhance efficiency with online collaboration







Link



Image



**Table** 



Rotate/ Flip



**Pixilation** 



Cut



Chrome extension



File



YouTube



Checklist



Text



**Shapes** 

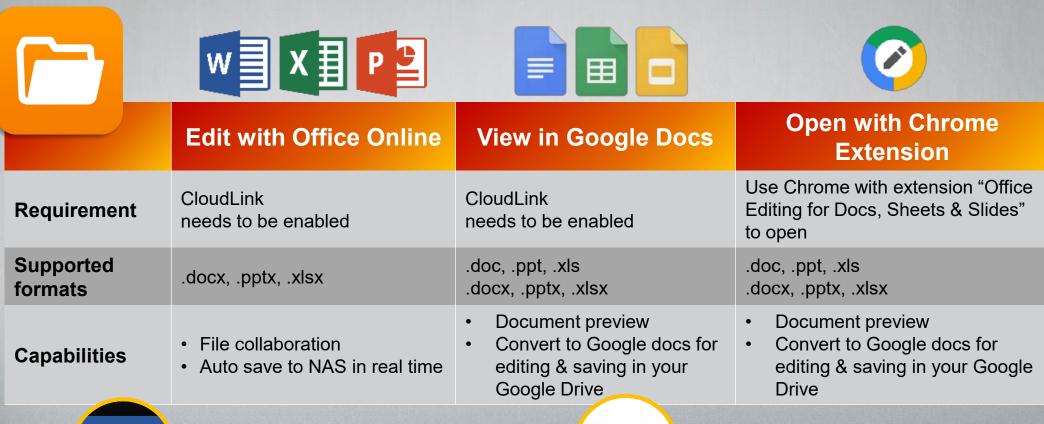


Brush



Mobile apps

### Easily make NAS your team collaboration portal with File Station



Saving...

Save to NAS in real time



Multi-user online editing

## QuMagie smart photo albums and Al classification for different subjects



- Organize photos with similar faces and subjects
- Over 400 different themes
- Helps company to quickly locate and share objects or projects.



**TS-1273AU-RP** 



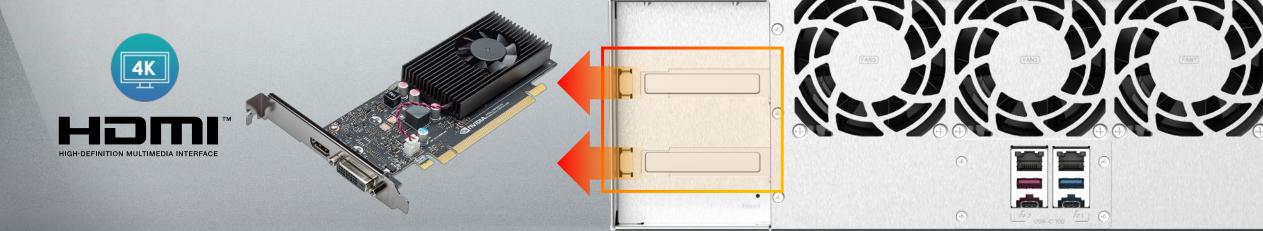
# Install a graphics card for HDMI output and GPU-accelerated computing

The TS-x73AU series offers a PCIe Gen3 slot to support low-profile graphics cards that do not need additional power to boost performance of applications such as video editing, 4K UHD transcoding, imaging processing in QTS and performance of virtual machines via GPU passthrough.

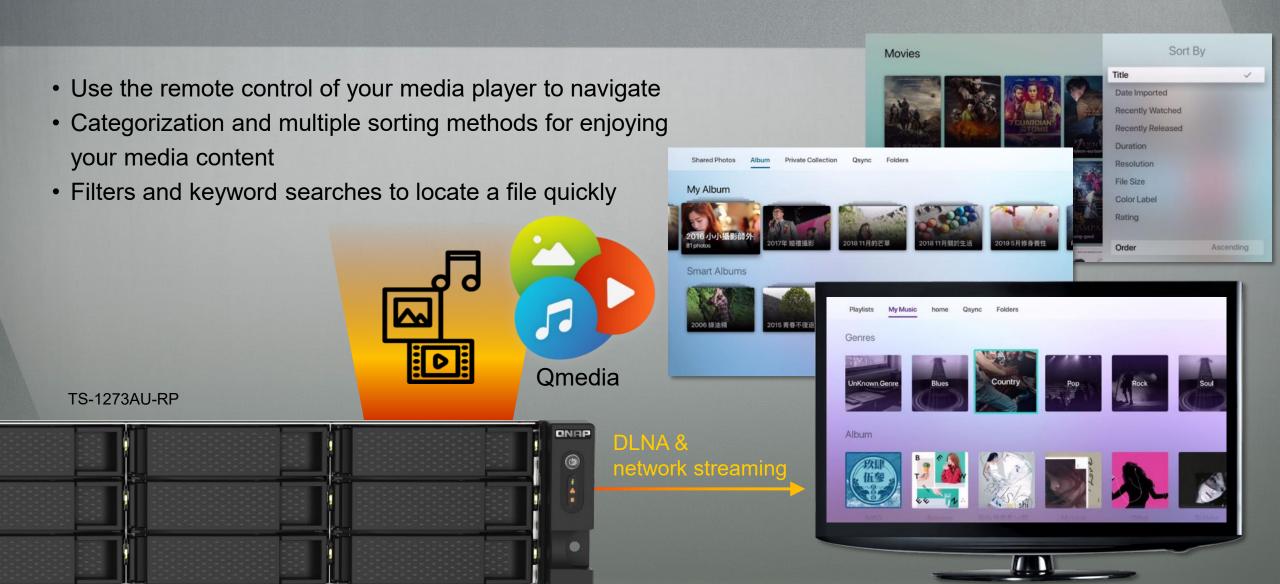
TS-873AU-RP & TS-1273AU: 1 x PCle 3.0 x8 slot



TS-1273AU-RP & TS-1673AU-RP: 2 x PCle 3.0 x4 slots



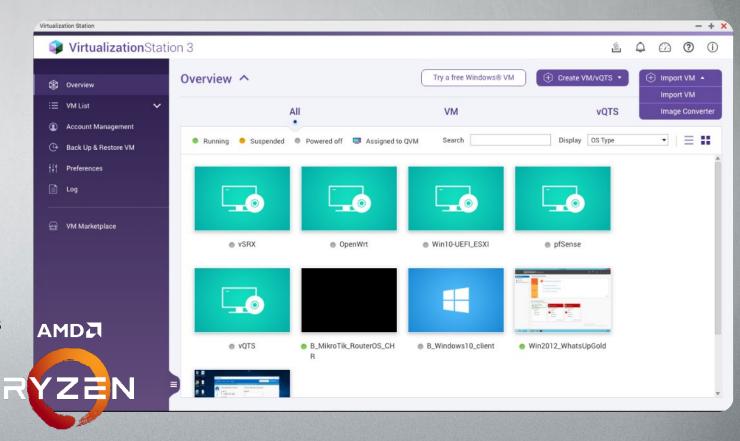
### Multimedia streaming to Smart TV, Apple TV, Chromecast, Fire TV & Roku



### 4C/8T 2.2GHz for Virtualization Station to run guest OSes and save additional hypervisor costs

With Virtualization Station, you can create multiple virtual machines to run various operating systems such as Windows, Linux, UNIX and Android on a QNAP NAS.

- Operate VM via remote desktop
- VM Import/Export
- VM backup and snapshot
- Virtual switch: support multiple network modes
- Support USB device connection
- GPU passthrough with an external graphics card for VM



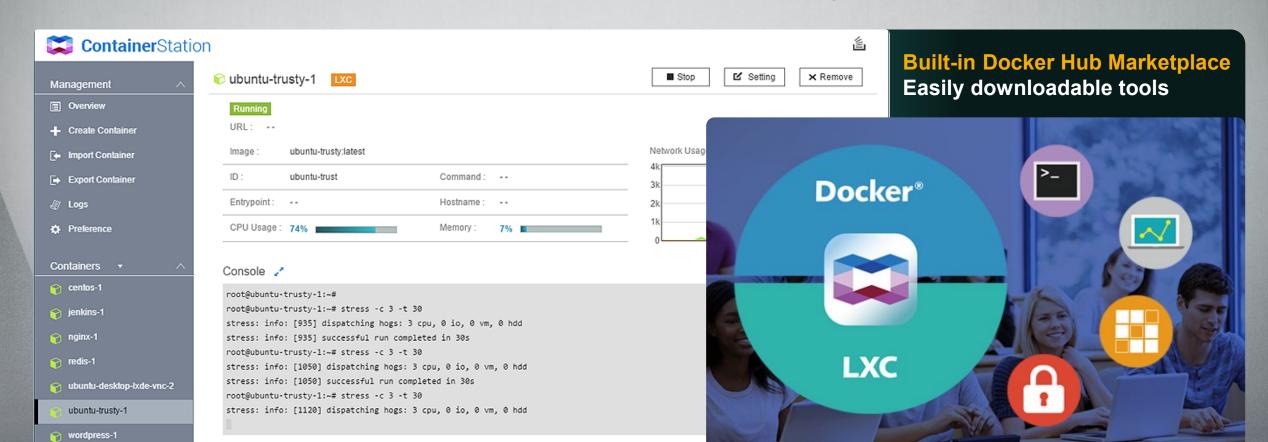
### Go beyond your creativity with Container Station for a x86 Quad-core NAS with up to 64 GB RAM

#### Al, IoT, Commonly-used Container Recommendation

- One-click installation wizard helps you quickly set up containers
- Supports Docker Compose YAML format to create applications

#### **Easily import/export containers**

- Imports images or containers from PC or NAS
- Exports images or containers to NAS as backup



### HybridMount provides two modes for file-based cloud storage gateway

	File Station Mount	File Cloud Gateway
Setup Method	Mount cloud drives	Select "File Cloud Gateway" mode and create a dedicated cache space
Connections	No limit	2 free and perpetual connections. Purchase license for more connections
Access Performance	Depends on network speed	High performance thanks to caching
Access in File Station	Supported	Supported
Access through SMB / NFS / AFP	Not supported	Supported
Sync with the cloud	Sync only when browsing	Sync constantly for quick access
Integration with QTS Apps	Not supported	Supported 🙋 🔼 🞵 🗈























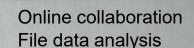


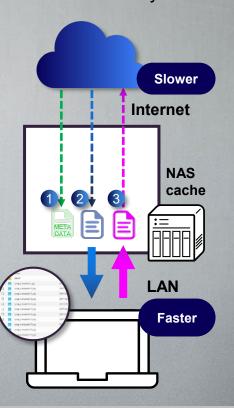




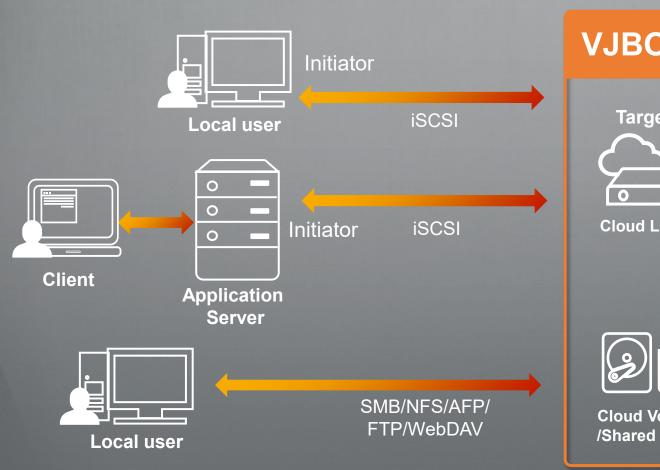








# Enterprise LUN backup: VJBOD Cloud block-based gateway







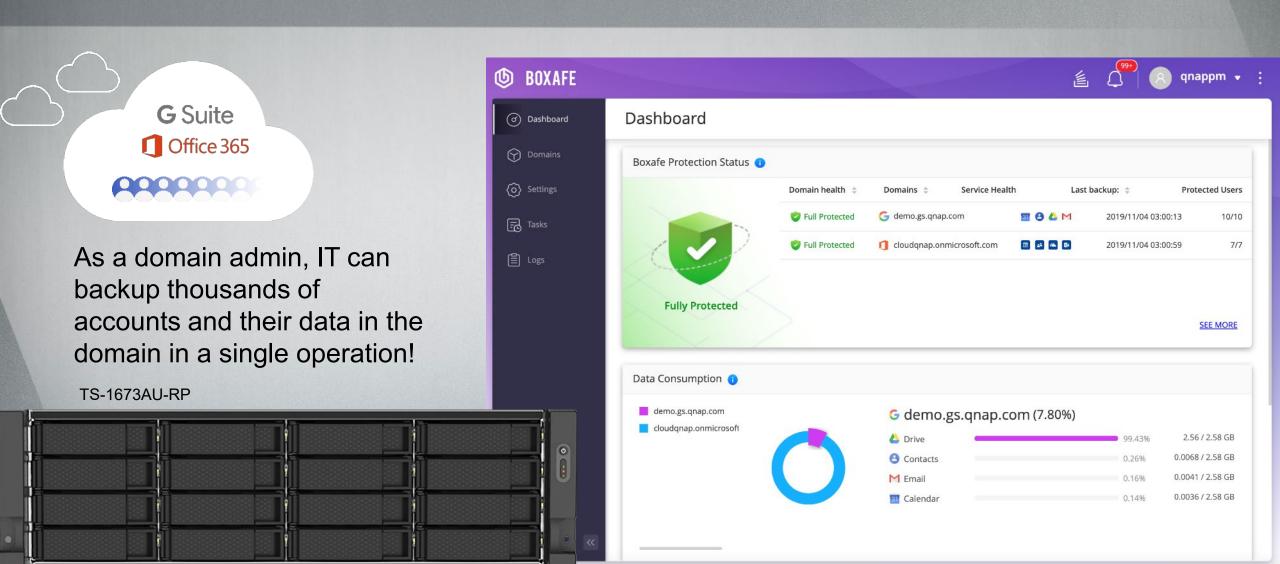


# Use Virtual JBOD to expand NAS capacity via 2.5GbE/10GbE iSCSI protocol

#### Max. 8 VJBOD connections



## Backup G suite & Office 365 accounts and files to NAS with Boxafe



### Protect your business with 24 x 7 surveillance solution and centralized management system



#### **QVR Pro**

5,800+ compatible IP cameras

8 free camera channels

Expandable channels via licenses

- TS-1673AU-RP: max. 56 ch. recommended
- TS-1273AU-RP: max. 48 ch. recommended
- TS-873AU-RP & TS-873AU: max. 32 ch. recommended

QUSBCam2 for webcam recording



Monitor feeds w/ iOS & Android

Windows, Mac & Ubuntu support

NAS HDMI output with USB keyboard, mouse after installing a PCle graphics card

# 2020 TS-x73AU SMB NAS with advanced Ryzen on the horizon

NAS models	QNAP TS-1673AU-RP, TS-1273AU-RP	Other 16-bay & 12-bay NAS
Processor	AMD Ryzen V1500B 4C/8T 2.2 GHz	Intel Atom C3538 4C/4T 2.1 GHz
System memory	TS-1673AU-RP: 16 GB TS-1273AU-RP: 8 GB	4 GB
Memory speed	2400 MHz	2133 MHz
Network port	2 x 2.5GbE (2.5G/1G), optional 10GbE	4 x 1GbE, optional 10GbE
Fibre channel	Optional QXP-16G2FC 2 x 16GFC adapter	
USB port	Type-C: 2 x USB 3.2 Gen 2 10Gb/s Type-A: 1 x USB 3.2 Gen 2 10Gb/s + 1 x U3.2 Gen1 5Gb/s	Type-A: 2 x USB 3.0 5Gb/s
PCle slot	2 x PCIe Gen3 x4 (changeable to 1 x PCIe Gen3 x8 with an optional accessory)	1 x PCIe Gen3 x4
HDMI output & video transcoding	Optional PCIe graphics card	
Expansion enclosure	Up to 96Gb/s various QNAP SAS, PCIe to SATA, and USB enclosures	eSATA 6Gb/s enclosure

Extend the 3-year standard warranty to a total of 5 years with the extended warranty purchase.



#### **Ext. Warranty**

• EXTW-BROWN-2Y:

TS-873AU, TS-873AU-RP,

**TS-1273AU-RP** 

• EXTW-RED-2Y:

**TS-1673AU-RP** 

QNAP

8/12/16-bay Rackmount NAS Series

Next-gen CPU and LAN speed exceed your expectation about SMB NAS

Copyright © 2020 QNAP Systems, Inc. All rights reserved, QNAP® and other names of QNAP Products are proprietary marks or registered trademarks of QNAP Systems, Inc. Other products and company names mentioned herein are trademarks of their respective holders.

