

INTRODUCING QNAP TURBO NAS



Agenda

- Introduction of QNAP Turbo NAS
- Product Lineups
- Hardware spec
- Introduction of QNAP NVR
- How it works with Control4

FEATURES & APPLICATIONS

Your Media Storage / Person Cloud



THE EVOLUTION OF PERSONAL CLOUD



GEN 1



- Mobile App Access
- Remote Access
- File Sharing

GEN 2



- Built in App Center
- NAS is the Platform to run a lot more Apps

GEN 3



- Virtualize your Laptop & PC on your own cloud
- vPC (Hosting Multiple OS)
- Local Display (Taking over the role of a PC)

HIGHLIGHT OF QNAP NAS



- Solid hardware, in-house design
- High performance, reliable, and easy-to-use storage
- Intuitive user interface
- Easy to share and backup your media files
- HDMI output - XBMC built-in
- Support hardware on-line, offline transcoding
- Virtualization Station - capable of running windows on VM

SHARE FILE ACROSS PLATFORM



- Support SMB/CIFS, NFS, AFP, FTP
- Access & manage files through web browser
- Support securely access with SSL



SHARED STORAGE & ACCESS EVERYWHERE



- Share and back up your data to cloud
- Remotely access all your digital contents
- Share all your files with family and friends instantly
- Free life time connectivity service!
- Add TB of space to your personal devices

From your PC



From your laptop



From your mobile
device



HOME MEDIA CENTER



- 1 Plex Media Server
- 2 Airplay, DLNA Server
- 3 XBMC Built-in as a Media Player
- 4 Well-Integrated with Control4

NEXT GENERATION PRIVATE CLOUD STORAGE

QNAP EXCLUSIVE ● ● ●

- **Virtualization Station** – **On-device hypervisor**, operates Windows & Linux OS VMs on one QNAP unit
- **HD Station** – **HDMI Output** on storage
 - (1) With XBMC player built-in & 7.1 surround sound pass-through support
 - (2) QvPC: Use your NAS like a PC
- **Hardware Accelerated Transcoding** – Real-time & offline Full HD **hardware accelerated video transcoding**
- **App Center** – Hundreds of server & business Apps



HD STATION



- Simply connect the NAS to a TV and with the **built-in XBMC player**, all the stored movie and media can be watched and enjoyed directly.
- Support **7.1 surrounding sound pass-through**
- The HD Station & XBMC feature is uniquely **well integrated with Control 4** home automation systems



HD STATION QvPC

USE YOUR NAS AS A PC ● ● ●

- QvPC- The NAS can be used as a PC and storage.
- Browse the web with Chrome browser with the built-in VM support.
- IP Surveillance: Live monitoring via HDMI connected TV or Monitor
- An energy-saving way to keep an always on PC, resolving the printing & file browsing demand



ON-THE-FLY TRANSCODING



- Powerful video on-the-fly transcoding and playing.
- Supports popular video file formats including MKV, AVI, MP4, MOV, and WMV
- Very high hardware performance, supporting up to **5 viewers** watching different videos at the same time*



TRANSCODING



- Challenge - HD video files are getting popular and common
- Store and backup the HD/ best quality content and still can easily share & stream with transcoded file
- QNAP NAS is powerful enough to transcode on-the-fly(real-time) or offline. The offline transcoding feature can support up to **4K resolution** video files.



QTS 4















Intuitive Windows-like Management System



WHAT IS QTS 4

QTS 4.1 operating system comes equipped with

- All-new design with a very easy-to-use interface
- Secure and reliable storage platform with built-in RAID protection
- User-oriented applications aimed towards home-use, multimedia-centralization, business file-sharing, backup and etc.
- Complete server applications

APPLICATIONS FOR HOME-USERS	APPLICATIONS FOR BUSINESSES
    Photo Station Music Station Download Station QAirplay	    Qsync Virtualization Backup Station Shared Folders
   File Station Video Station Surveillance Station	   myQNAPcloud App Center Storage Manager

UNLIMITED POSSIBILITIES APP CENTER



1 RICH APPLICATIONS

100+ Apps available for downloading

Some are QNAP Exclusive

2 CONTINUE GROWING

100+ active app developers in QNAP community

3 ALL-IN-ONE SERVER

Download station, Surveillance Station, Web server, DB server, Plex Media Server

LIVE DEMO

QTS 4

Live Demo
Account: qnap
Password: qnap

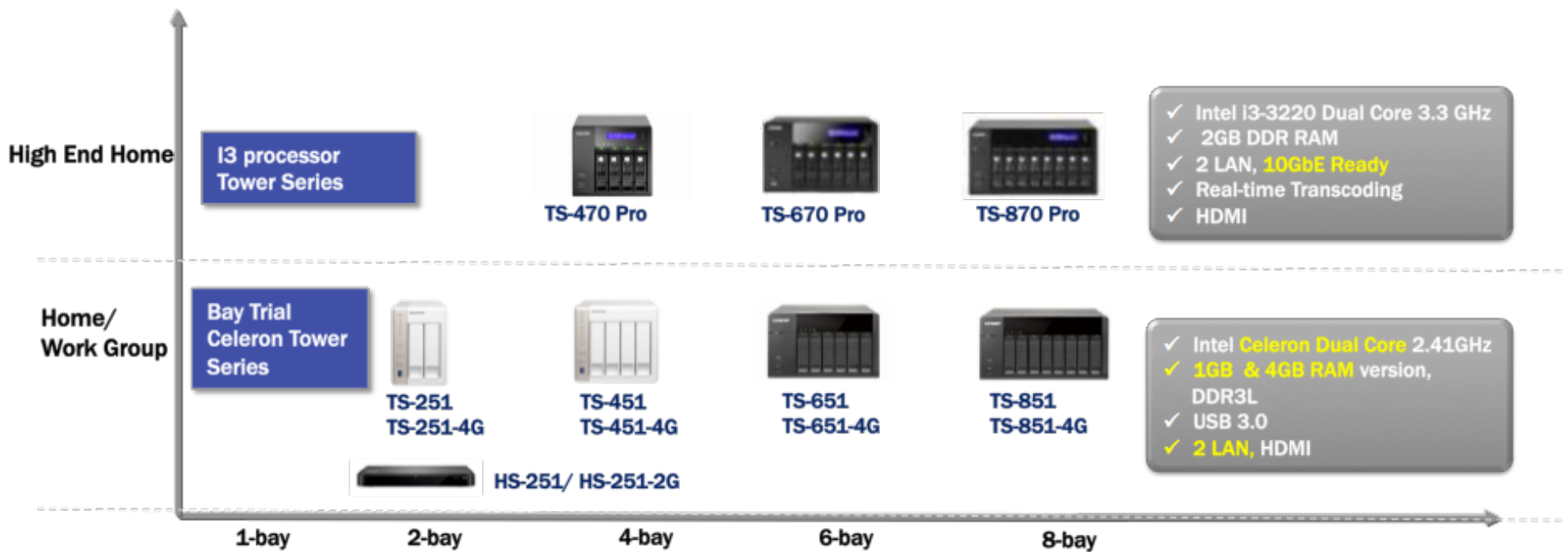


NAS MODELS

Available in Control4 Store



NAS PRODUCTS



TS-X51 SERIES

High performance NAS for SOHO & Home Users

- Dual-core Intel® Celeron® 2.41 GHz processor, **burst up to 2.58GHz**
- HDMI, XBMC built-in
- Dual Ethernet LAN ports
- Memory: **1GB & 4GB SKUs**, DDR3L RAM, expandable up to 8GB
- High performance up to 220MBps read & write speeds



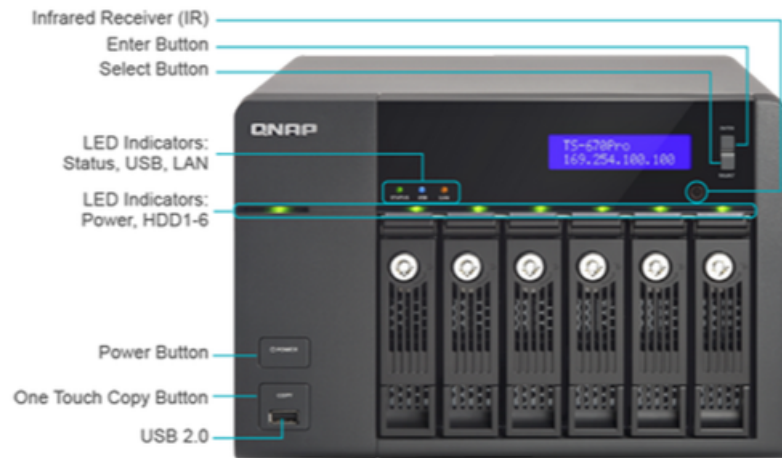
TS-X70 PRO SERIES

Powerful, Reliable and Scalable NAS for Home & SMBs

- Cutting-edge Core i3-3220 3.3 GHz Dual-Core Processor
- 2-LAN ports, (Up to 4 ports)
- Memory: 2GB, DDR3L RAM, expandable up to 8GB
- HDMI, XBMC built-in
- iSCSI IP-SAN, NFS as datastore for VMware, Citrix and Hyper-V
- Centralized data storage, sharing, backup and management
- Unified storage, virtualization-ready with comprehensive business applications



PANEL FRONT



1

INDICATORS

System status, USB, LAN, HDD

2

BUTTONS

Power, One touch copy, Enter, Select

3

HDD SLOTS

Lock (only x70 Pro Series)

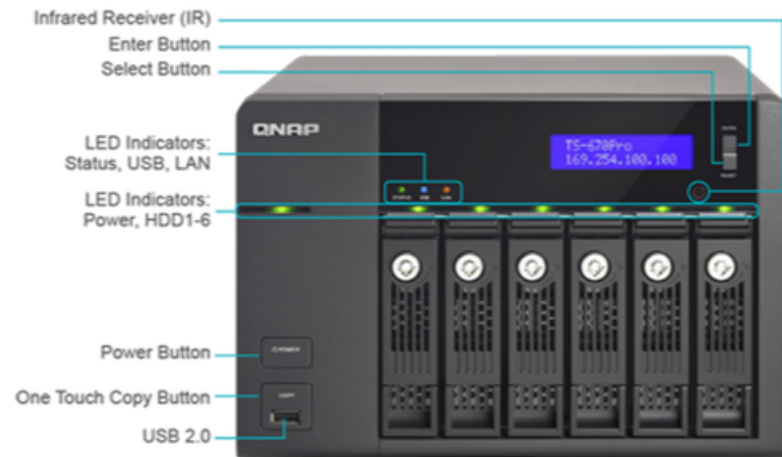
4

LCE PANEL (ONLY X70 PRO SERIES)

Quick, network, and storage setup

PANEL FRONT

INDICATORS



- System status - Red/Green
- USB - Blue
- LAN - Orange
- HDD - Red/Green
- PWR - Green (only on x70 Pro Series)

INDICATORS

SYSTEM STATUS



System Status	Red/ Green	Flashes green and red alternately every 0.5 sec	<ol style="list-style-type: none"> 1. The hard drive on the NAS is being formatted 2. The NAS is being initialized 3. The system firmware is being updated 4. RAID rebuilding is in process 5. Online RAID Capacity Expansion is in process 6. Online RAID Level Migration is in process
		Red	<ol style="list-style-type: none"> 1. The hard drive is invalid 2. The disk volume has reached its full capacity 3. The disk volume is going to be full 4. The system fan is out of function 5. An error occurs when accessing (read/write) the disk data 6. A bad sector is detected on the hard drive 7. The NAS is in degraded read-only mode (2 member drives fail in a RAID 5 or RAID 6 configuration, the disk data can still be read) 8. Hardware self-test error
		Flashes red every 0.5 sec	The NAS is in degraded mode (one member drive fails in RAID 1, RAID 5 or RAID 6 configuration)
		Flashes green every 0.5 sec	<ol style="list-style-type: none"> 1. The NAS is starting up 2. The NAS is not configured 3. A hard disk drive is not formatted
		Green	The NAS is ready
		Off	All the hard disk drives on the NAS are in standby mode

INDICATORS

SYSTEM STATUS



LAN	Orange	Orange	The NAS is connected to the network
		Flashes orange	The NAS is being accessed from the network
HDD	Red/ Green	Flashes red	The disk data is being accessed and a read/write error occurs during the process
		Red	A hard disk drive read/write error occurs
		Flashes green	The disk data is being accessed
		Green	The hard disk drive can be accessed
USB	Blue	Flashes blue every 0.5 sec	<ol style="list-style-type: none">1. A USB device (connected to the front USB port) is being detected2. A USB device (connected to the front USB port) is being removed from the NAS3. The USB device (connected to the front USB port of the NAS) is being accessed4. The data is being copied to or from the external USB or eSATA device
		Blue	A front USB device is detected (after the device is mounted)
		Off	<ol style="list-style-type: none">1. No USB device is detected2. The NAS has finished copying the data to or from the USB device connected to the front USB port

PANEL BACK



- 1 EXPANSION SLOT (X70 PRO SERIES ONLY)**
Optional PCI-E card
- 2 ESATA**
External HDDs
- 3 USB**
External HDDs, UPS, Printers
- 4 LAN**
Gigabit x2 Up to 4 with expansion card
- 5 HDMI**
HD Station Apps

BEEPS



Beep Sound	Number of Times	Description
Short beep (0.5 sec)	1	<ol style="list-style-type: none">1. The NAS is starting up2. The NAS is being shut down (software shutdown)3. The user presses the reset button to reset the NAS4. The system firmware has been updated
	3	The user tries to copy the NAS data to the external storage device from the front USB port, but the data cannot be copied.
Long beep (1.5 sec)	3, every 5 min	The system fan is out of function
	2	<ol style="list-style-type: none">1. The disk volume is going to be full2. The disk volume has reached its full capacity3. The hard drives on the NAS are in degraded mode4. The user starts the hard drive rebuilding process5. A hard drive is plugged in or out
	1	<ol style="list-style-type: none">1. The NAS is turned off by force shutdown (hardware shutdown)2. The NAS has been turned on successfully and is ready

HOW TO CHOOSE A NAS



- Capacity - How many bays
- Possible concurrent users - CPU power
- [NAS Selector](#)

1

TS-X51 SERIES

- Economical choice
- Intel Celeron 2.41 GHz
- 1GB RAM - up to 8G

2

TS-X70 PROS SERIES

- Very high performance
- Intel Core i3 3.3 GHz
- 2GB RAM - up to 16GB
- LCD Panel, lockable tray

QNAP VIOSTOR NVR

QNAP VIOSTOR NVR

QVR 5



- Cutting-edge web management system
- Liveview, recording, and playback
- Web, local display view and control (DVR-like experience)
- Support **2300+ cameras** and **over 90 brands**
- **Mobile App** Available



NVR MODELS

QVR 5



- 2 bays
- 4, 8, 12 channels
- HDMI output



LIVE DEMO

QVR 5

[Live Demo](#)

Account: qnap
Password: qnap



HOW QNAP DEVICES WORK WITH CONTROL4



CERTIFIED DRIVERS



- All QNAP devices are SDDP built-in
 - NAS: v4.0.1 or above
 - NVR: v5.0.0 or above

1

QNAP NAS

- Network storage only
- Instantly sync with Control4 Movie Library
- Requires another Control4 Compatible network player

2

QNAP NAS HD STATION

- Act as a storage & media player
- Play Full HD, 4K videos

3

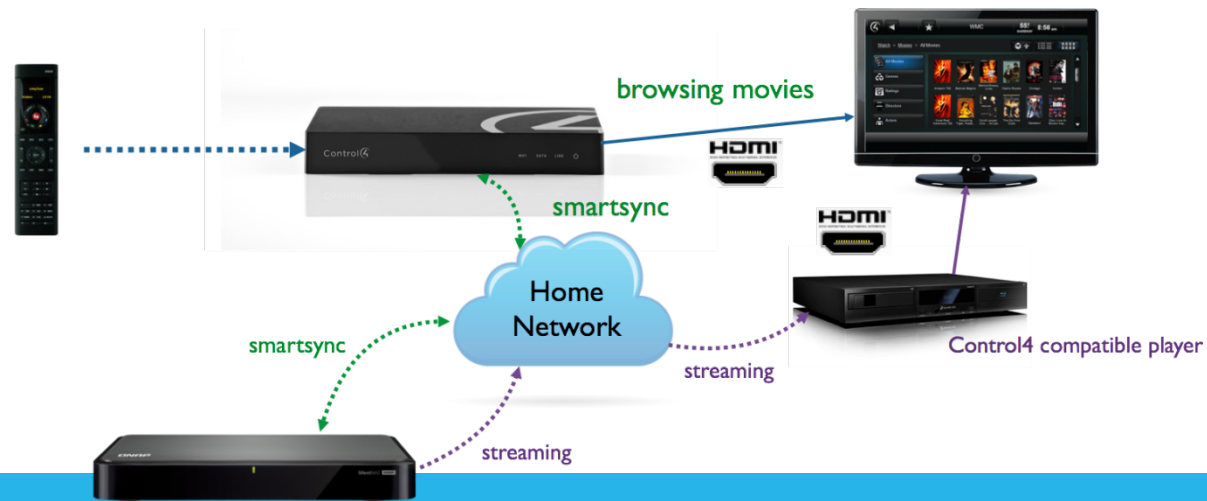
VIOSTOR NVR IP

- HDMI-output
- DVR-like
- Quick view camera streams from NVR interface

QNAP NAS



- Storage only
- Auto-sync with video/audio library in C4
 - Mac address required in Composer setting
 - Notify C4 controller when new media files are added in within 30 secs



1. Add NAS from “Discovered” tab
2. Setup the property in **System Design**
 - Mac address
 - Interval to check if any new media added in
3. Add a Network Attached Storage in **My Drivers**
 - Setup the share folder and credentials
4. Scan the media in **Media**
5. Add scan action in events in QNAP NAS driver in **Programming**

Debug Mode	Off	
QNAP MAC Address	000b9b8a4f5f	Set Cancel
Query Interval	600	

The screenshot displays three panels from the QNAP configuration interface:

- Device Events:** A tree view showing a hierarchy from 'House' to 'Main' to 'Room'. Under 'Room', there are several variables: 'Room Variables', 'QNAP VoStor NVR', 'QNAP NAS HD Station', 'QNAP NAS', 'VIDEO_COUNT', 'MUSIC_COUNT', 'PHOTO_COUNT', 'TIME_STAMP', and 'TIME_TEXT'. Below this, a 'VIDEO_COUNT Events' section shows a selected event: 'When VIDEO_COUNT changes'.
- Script:** A script editor showing a trigger: 'When the variable Room->QNAP NAS ->VIDEO_COUNT changes' and an action: 'Scan Room->Network File Storage Audio:mp3,flac,m4'.
- Device Actions:** A tree view showing a hierarchy from 'Room' to 'Room Variables' to 'QNAP VoStor NVR', 'QNAP NAS HD Station', 'QNAP NAS', 'VIDEO_COUNT', 'MUSIC_COUNT', 'PHOTO_COUNT', 'TIME_STAMP', and 'TIME_TEXT'. Below this, a 'Network File Storage Actions' section shows a selected action: 'Scan Room->Network File Storage Audio:mp3,flac,m4'.

QNAP HD STATION



- **XBMC built-in**

- Controlled by C4 system directly
- Can be Launched to play a video from C4 media menu



QNAP HD STATION

INSTALLATION

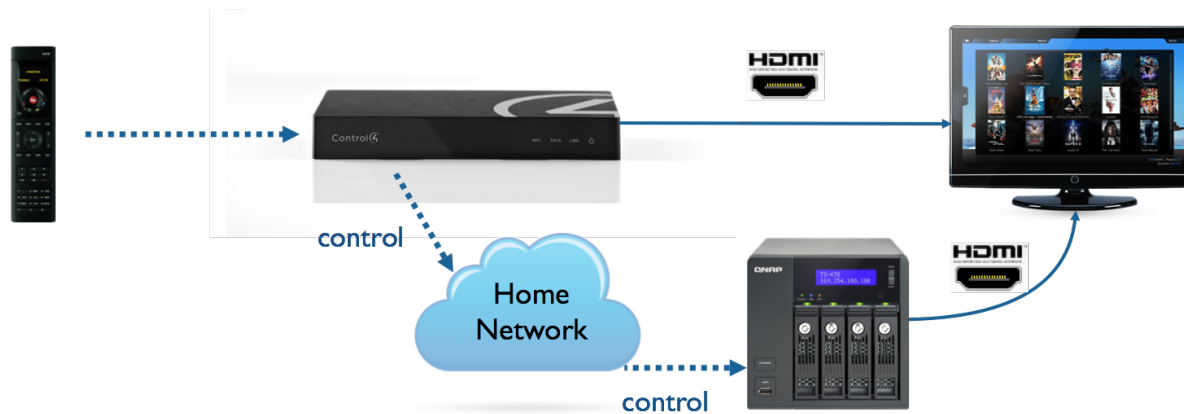


- Same as QNAP NAS driver
 - Enable the “**Allow programs on other systems to control XBMC**”
 - “Services” > “Settings” > “Remote control”
-

QNAP VIOSTOR NVR



- Quickly switch channels
- Quick change grip layout
- Pan, Tilt, and Zoom (if applicable)
- Playback (rewind, forward, pause, play)





1. Add NVR (Shown as cable) from “**Discovered**” tab
2. Setup the property in **System Design**
 - Credentials (username, password)
3. Optional: Customize Red, Green, Yellow, Blue button
 - Month up/down, channel up/down, layout next/previous, or zoom-in/out and so on...
4. Install **Remote Control Agent** in NVR App Center (Web login)
5. Enable anonymous access (*), or enter the credentials and check the “**Remember the Password**”

*: NVR have anonymous login on local display when enable “anonymous access” on the webpage
You can enable this option in the Surveillance Console > System Settings > Security Settings

WHAT DRIVERS SHOULD I CHOOSE?



- **QNAP NAS**
 - NAS without HDMI (TS-220,TS-231)
 - v4.1.0 or above
- **QNAP NAS HD Station**
 - NAS with HDMI (TS-x51, TS-x70 Pro Series)
 - v4.1.0 or above
- **QNAP NVR IP**
 - All QNAP NVR Series
 - v5.0.1 or above

HARD DRIVES RECOMMENDATIONS



- [Compatibility list](#)
- The desktop-class hard drive is designed to have the performance for everyday use.
- The enterprise-class hard drives designed for the 24/7 mission critical business operations and exceptional performance appropriate for RAID
- Seagate® NAS HDDs, Seagate® Surveillance HDD or above

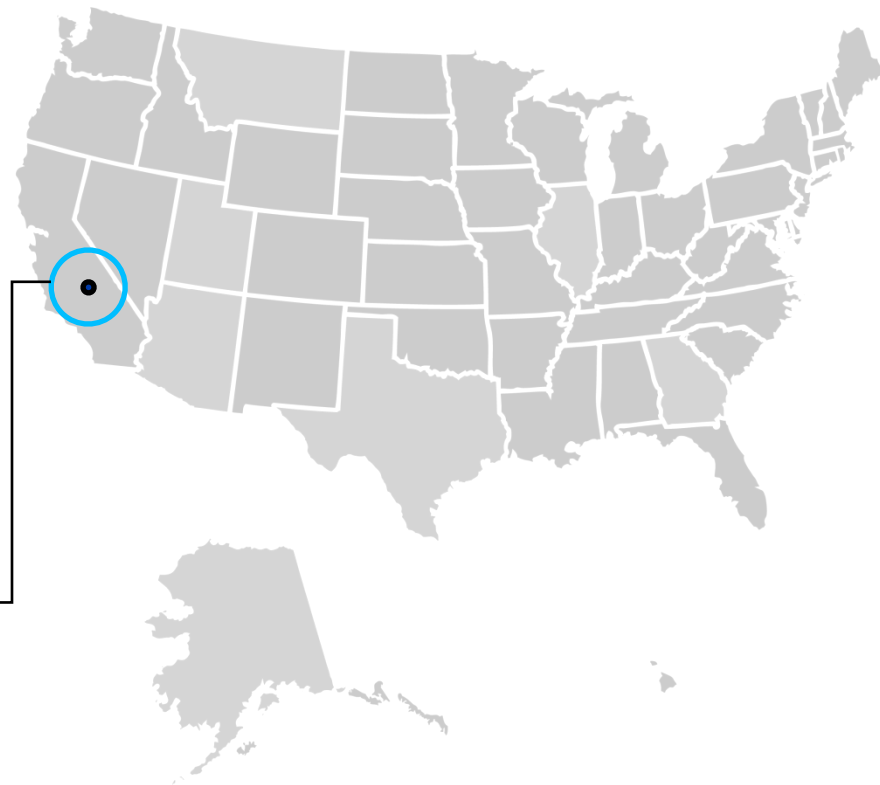
CONTACT INFO

GENERAL SALES & MARKETING CONTACT

usasales@qnap.com

TECH SUPPORT CONTACT

- Tech Support Service Hours: 06:00–18:00 PST (GMT -8, Mon–Fri)
- Online request form: <http://helpdesk.qnap.com/>
- Online live web chat: [Goto](#)
- Dealer Support Hotline: **+1-909-595-2782 # 3**
- To contact our storage product specialist, please call +1-909-595-2782 #1



APPENDIX

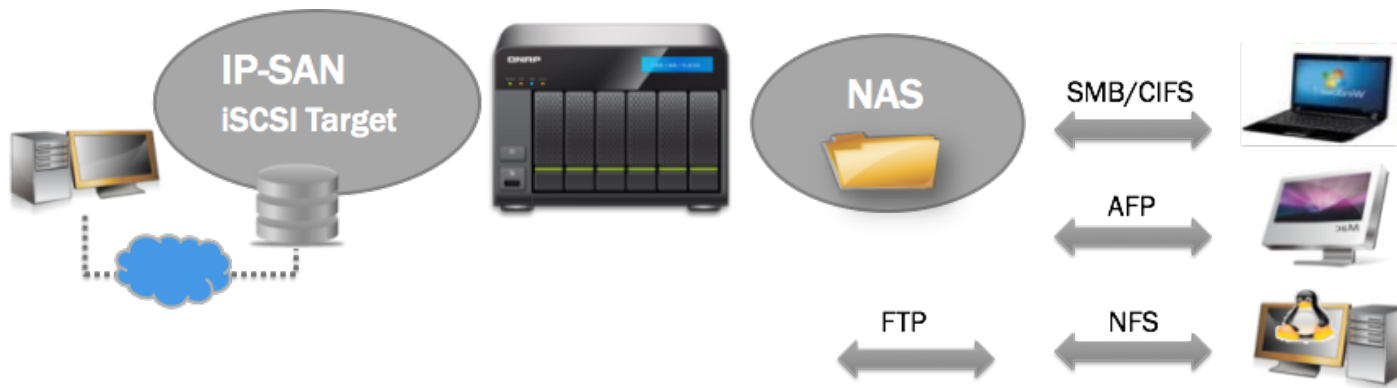
OTHER FEATURE DETAILS



APPLICATIONS UNIFIED STORAGE



Both NAS and IP-SAN can be running concurrently



APPLICATIONS

MULTIPLE DISASTER RECOVERY SOLUTIONS



- **RTRR** – Replicate important files from one NAS to another NAS across network by schedule or in real-time
- **Rsync** – Back up data to a remote standard Rsync server on a scheduled basis



Backup to Cloud –

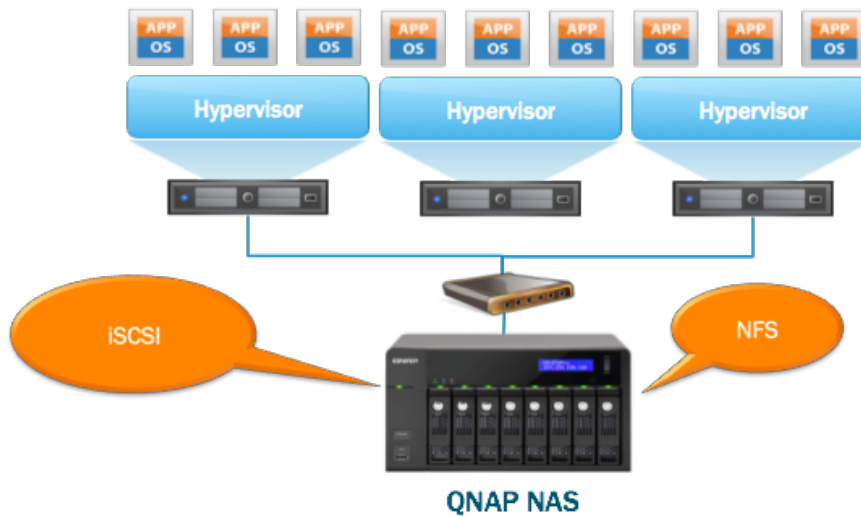
- Amazon® S3
- Amazon Glacier
- Microsoft® Azure
- ElephantDrive®
- Dropbox®
- Google® Drive

APPLICATIONS DATASTORE



- Datasore for “Server Virtualization Environment”

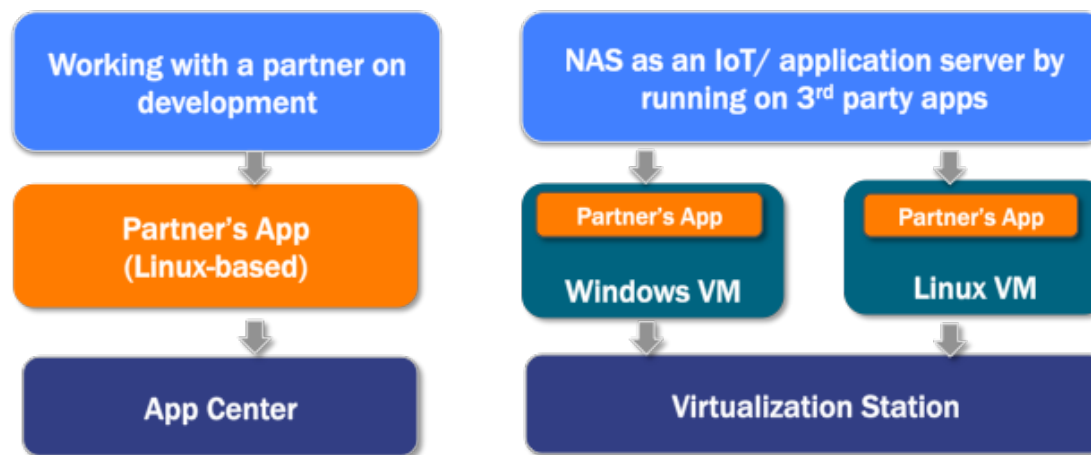
- QNAP NAS is the most affordable Virtualization Storage



- VMware Ready Certified
- Citrix Ready Certified
- Microsoft Hyper-V Compatible



APPLICATIONS IOT SERVER PLATFORM



APPLICATIONS

IP CAM/ SURVEILLANCE STORAGE



- Surveillance Station
 - IP camera recording
 - **DVR-like Experience:** Local Display/ Live Monitoring thru

HDMI

