

NAS v.3 New Features

faster, smoother and smarter



Introducción

Qué es Nuevo en el firmware v3?

- ❖ Servicio de Descubrimiento en Red
 - ⌘ UPnP (Para Windows PC using Vista o XP)
 - ⌘ Bonjour (Para Mac PC)
- ❖ Monitoreo de Dispositivos en Red
 - ⌘ SNMP
- ❖ EXT 4
- ❖ Virtual Disk
- ❖ Bitmap
- ❖ RAID Recovery

Agenda

Servicio de Descubrimiento en Red

- ***UPnP***

- UPnP Discovery
- UPnP Media Server
TwonkeyMedia
- NMP v 1.1.1 / PS3

- ***Bonjour***

- Bonjour en un QNAP NAS
- Bonjour en una MAC PC

Monitoreo de Dispositivos de Red

- ***SNMP***

- SNMP en un QNAP NAS
- SNMP en un UPS APC
- SNMP en una PC de Windows

SNMPc

UPnP – Descubrimiento en Red

- **UPnP**

- **UPnP Discovery**

- UPnP Media Server

- TV

- NM

The screenshot shows the QNAP Turbo NAS web interface. The left sidebar contains a navigation menu with categories like System Administration, Disk Management, Access Right Management, Network Services, Applications, Backup, External Device, and System Status. The 'Network Services' category is expanded, and 'Network Service Discovery' is selected. The main content area is titled 'Network Service Discovery' and has two tabs: 'UPNP DISCOVERY SERVICE' (active) and 'BONJOUR'. Under the active tab, there is a section for 'UPnP Discovery Service' with the text: 'After enabling this service, your NAS can be discovered by any operating systems that support UPnP.' Below this text is a checkbox labeled 'Enable UPnP Service' which is checked and circled in red. An 'APPLY' button is located at the bottom right of the settings area. The footer of the interface shows '© QNAP, All Rights Reserved' and a 'QNAP Classic' dropdown menu.



El NAS puede ser ahora descubierto automáticamente por cualquier sistema operativo que soporte UPnP

UPnP – Descubrimiento en Red

- **UPnP**

- **UPnP Discovery**

- UPnP Media Server

- TwonkeyMedia



名稱	類別目錄	工作群組
nasbb97c0	其他裝置	
TS-219e-Fran	其他裝置	
TS-639	其他裝置	
[TS219e] TwonkeyMedia : PVConnect...	媒體裝置	
239-ZACK	電腦	NAS
CISCONAS	電腦	WORKGROUP

TS-219e-Fran

類別: 其他裝置
網路位置: 網路

No IP/hostname needed

Ahora puedes encontrar tu NAS sin la necesidad de recordar la IP o abrir el Qfinder.

UPnP – Media Server

- **UPnP**

- UPnP Discovery

- **UPnP Media Server**

TwonkeyMedia

- NMP v 1.1.1 / PS3

QNAP TURBO NAS

Home >> Applications >> UPnP Media Server

Welcome admin | Logout English

UPnP Media Server

Enable UPnP Media Server

After enabling this service, click the following link to enter UPnP Media Server configuration page

[http://\[IP\]:9000/](http://[IP]:9000/)

APPLY

MediaServer

TwonkeyMedia Configuration: Sharing

Version 4.4.17

Save Changes Cancel Rescan content directories

Content Locations:

[Field]

All content types Browse

[Field]

All content types Browse

Add new content directory

Directories where the server shall scan for content. Each directory can be limited to a certain content type. The default setting will scan for all content types. Sharing can be temporarily disabled by unchecking the directory.

Rescan in minutes: 60

This option specifies the rescan behavior of the server. If set to 0, automatic rescans are disabled. A positive value specifies the period between rescans of content directories in minutes. -1 enables the server to watch content directories automatically for new content without the need for rescans.

“Una mejor forma de disfrutar tu contenido digital ”

UPnP – Media Server

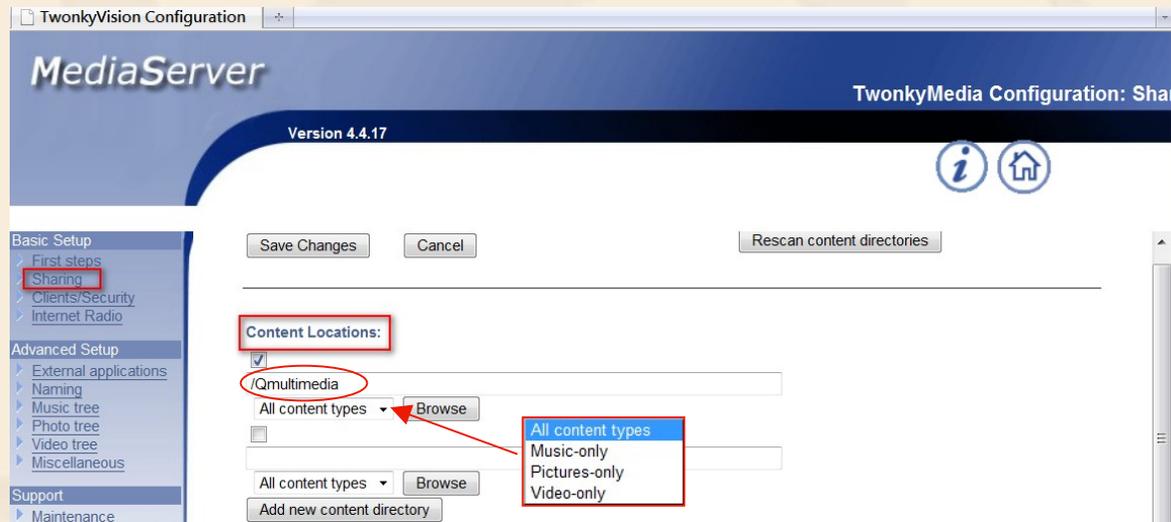
- **UPnP**

- UPnP Discovery

- **UPnP Media Server**

TwonkyMedia

- NMP v 1.1.1 / PS3



Paso 1:

Especificar las ubicaciones de los contenidos sobre la casilla 'Content Locations'.

Configurar el directorio de navegación para colgar tu música fotos y videos.



UPnP – Vista PC

• UPnP

- UPnP Discovery
- UPnP Media Server
- TwonkyMedia
- NMP1000 v.1.1.1

➢ Vista PC (Reproducer Windows Media)

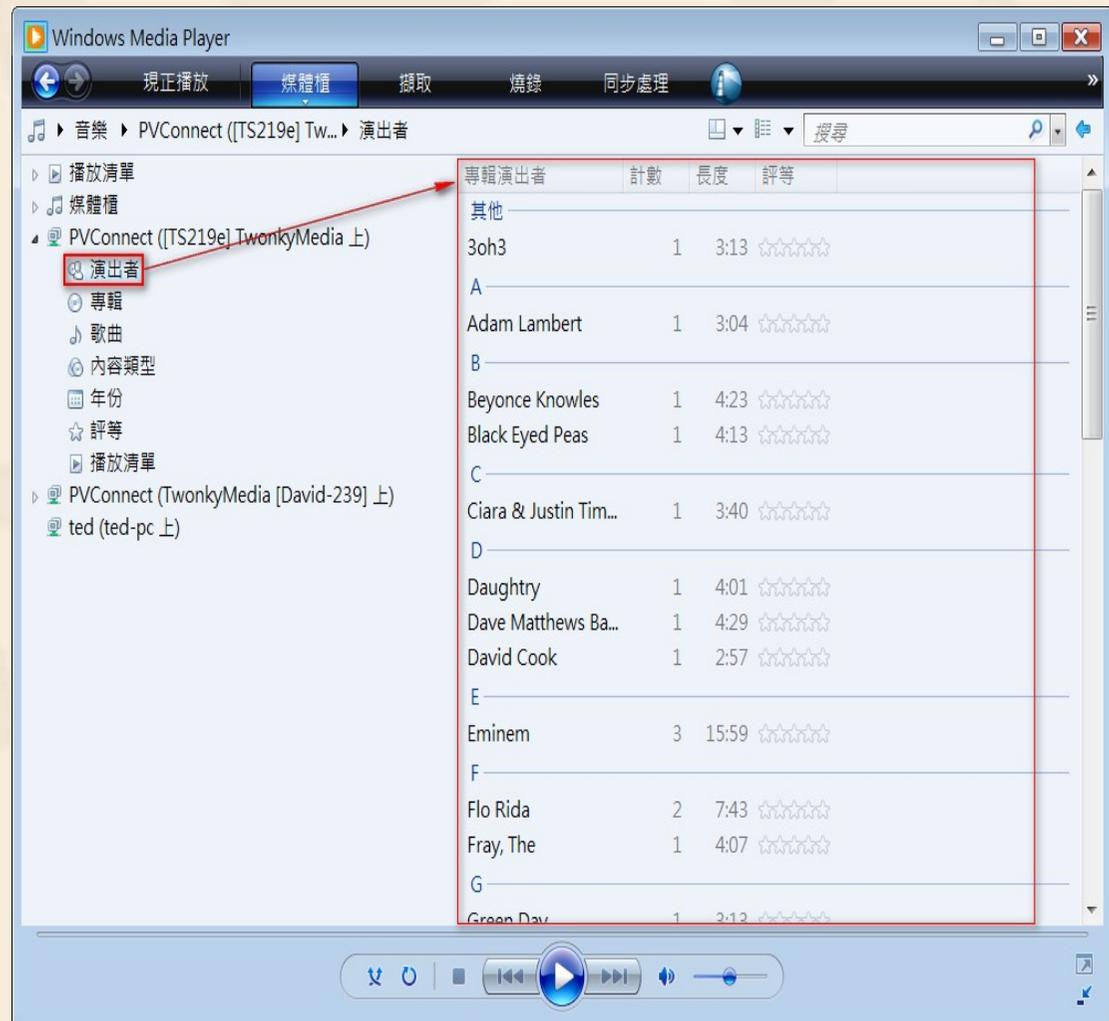


**Reproductor de Media UPnP en una PC con SO Vista
→ Windows Media Player**

UPnP – Vista PC

- **UPnP**

- UPnP Discovery
- UPnP Media Server
TwonkyMedia
- NMP1000 v.1.1.1
- **Vista PC**
(Reproducer Windows Media)



Bonjour

❖ Bonjour

- ☞ Un método general para descubrir dispositivos en la LAN.
- ☞ Usado a través del SO Mac OS X , el cual permite a los usuarios detectar y usar el NAS sin la necesidad de ninguna configuración.
- ☞ Reproduce los servicios del NAS automáticamente.
- ☞ Servicios de Red Soportados: **HTTP, SAMBA, AFP, FTP & SSH.**



Bonjour – QNAP NAS

- **Bonjour**

- **Bonjour en un QNAP NAS**

- Bonjour

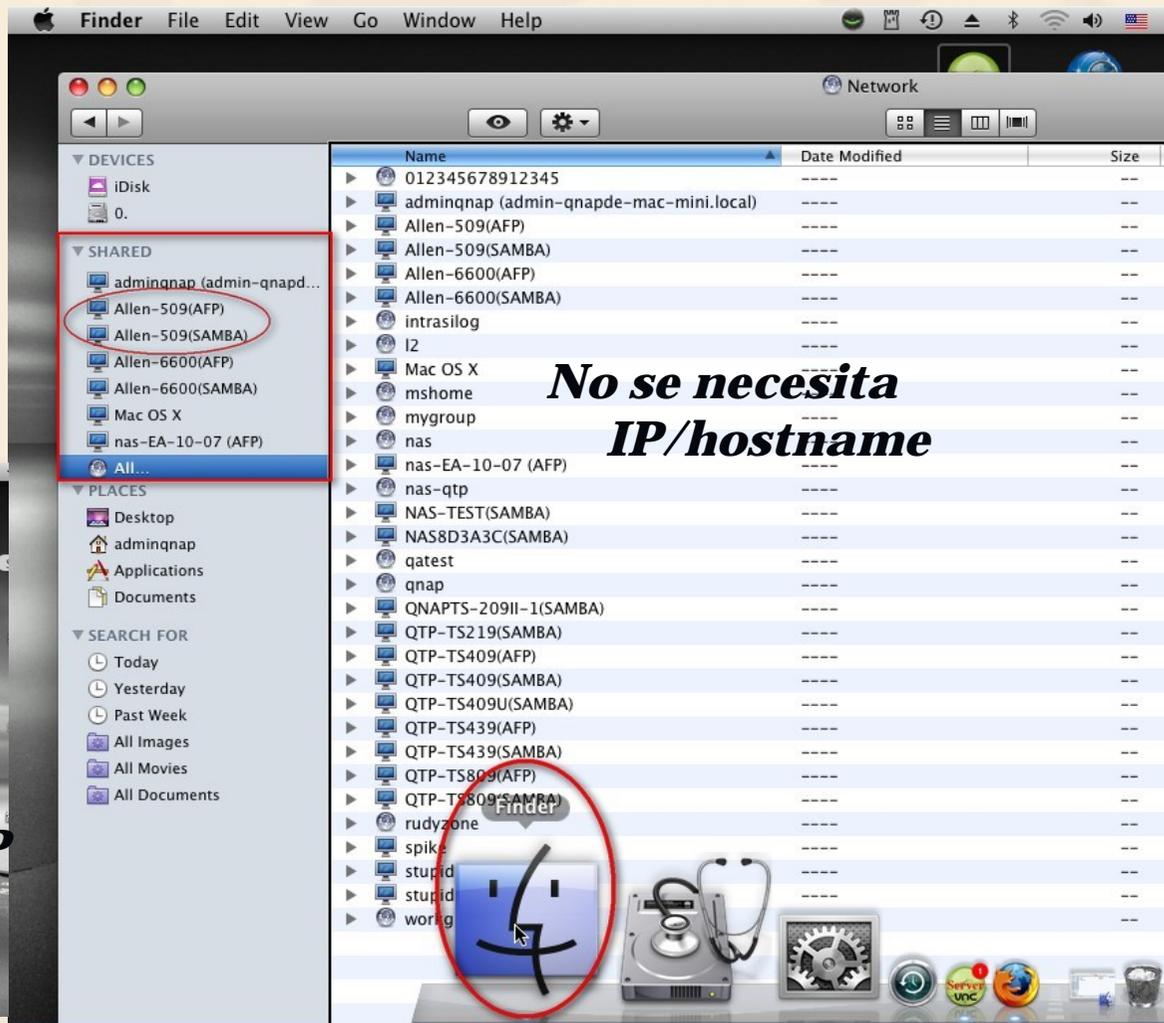
The image displays two screenshots of the QNAP Turbo NAS web interface. The main screenshot shows the 'Network Service Discovery' page with the 'BONJOUR' tab selected. A red box highlights the Bonjour configuration section, which includes a warning: 'Before broadcasting the following services through Bonjour, please DO NOT forget to enable these services first.' Below this, several services are listed with checkboxes and service name input fields: Web Administration (checked, Allen-509), SAMBA (checked, Allen-509(SAMBA)), AFP (Apple File Protocol over TCP/IP) (checked, Allen-509(AFP)), SSH (checked, Allen-509(SSH)), and FTP (checked, Allen-509(FTP)). A red oval highlights the AFP service name field. A red arrow points from this oval to a smaller inset screenshot of the 'Apple Networking' page, where the 'Enable Apple Filing Protocol' checkbox is checked and the 'Zone' field is empty. The 'APPLY' button is visible at the bottom of the inset.

Bonjour – MAC PC

- **Bonjour**

➤ Bonjour on QNAP NAS

➤ **Bonjour en una
PC MAC**



Bonjour – MAC PC

- **Bonjour**

➤ Bonjour on QNAP NAS

➤ **Bonjour en una
PC MAC**

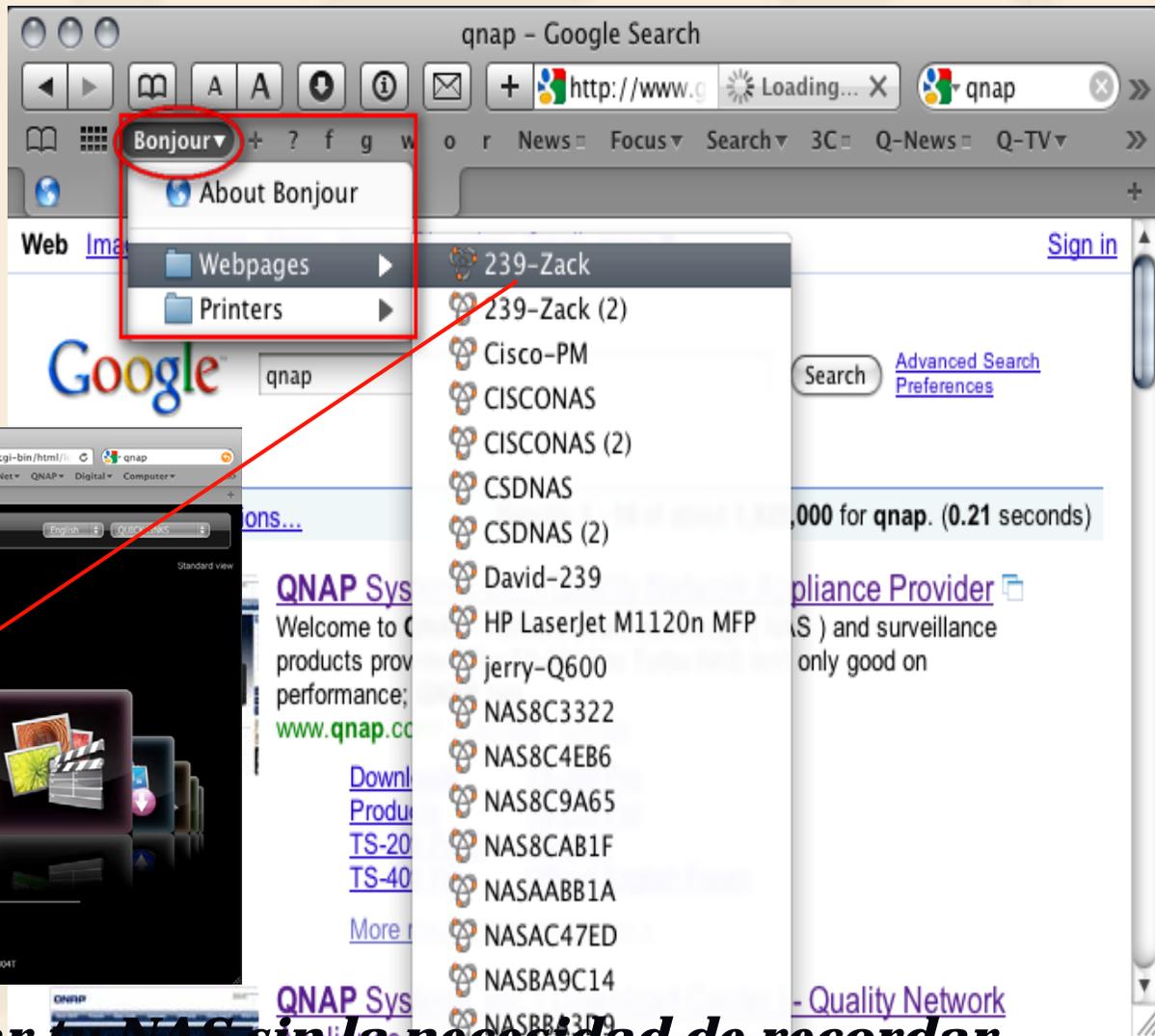
The image shows a Safari browser window with the 'Safari' menu open. The 'Preferences...' option is highlighted with a red circle. A red arrow points from this option to the 'Bookmarks' preferences window. In the 'Bookmarks' window, the 'Include Bonjour' checkbox is checked and also circled in red. The background shows a Google search result for 'qnap'.

Bonjour – MAC PC

- **Bonjour**

➤ Bonjour on QNAP NAS

➤ **Bonjour en una PC MAC**



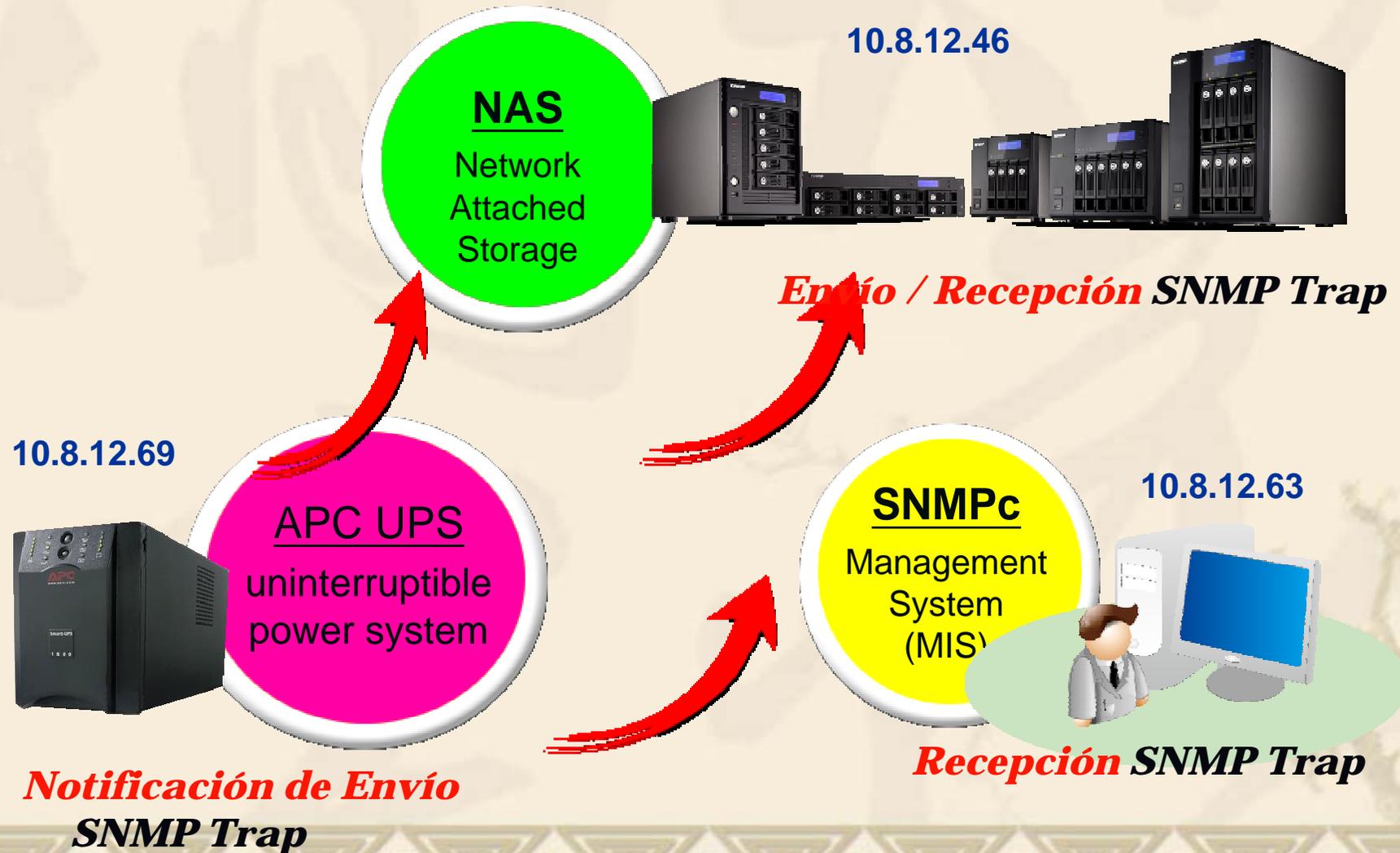
Ahora puedes encontrar tu NAS sin la necesidad de recordar la IP o usar el QFinder.

SNMP

Monitorea tus dispositivos en Red

- ❖ Protocolo de Administración de Red Simple
- ❖ Ampliamente usado en sistemas de administración de red para monitorear dispositivos en red s (p.e. NAS)
- ❖ Se puede enlazar el NAS hasta con 3 direcciones

SNMP



SNMP – QNAP NAS

- **SNMP**

- **SNMP en el QNAP NAS**

Enviar información al SNMPc (Management System)

QNAP
TURBO NAS

Home >> Network Services >> SNMP Settings

Welcome admin | Logout English

SNMP Settings

SNMP

After enabling this service, the NAS will be able to report information via SNMP to the managing systems.

- Enable SNMP Service
- Port Number: 161
- Community: public
- Send Event: Information Warning Error
- Trap Address 1: 10.8.12.63
- Trap Address 2:
- Trap Address 3:

Direcciones IP del SNMPc

SNMP MIB

To install the MIB to your managing systems, click [Download].

DOWNLOAD

Instalar el archivo MIB de NAS al SNMPc

© QNAP, All Rights Reserved QNAP Classic

SNMP – QNAP NAS

- **SNMP**

- **SNMP en el QNAP NAS**

- **SNMP on APC UPS**

- **SNMP on Windows PC**

Configurar la recepción de la información desde el UPS

Overview

- System Administration
- Disk Management
- Access Right Management
- Network Services
 - Microsoft Networking
 - Apple Networking
 - NFS Service
 - FTP Service
 - Telnet / SSH
 - SNMP Settings
 - Web Server
 - Network Service Discovery
- Applications
- Backup
- External Device
 - External Storage Device
 - USB Printer
 - UPS Settings**
- System Status

Home >> External Device >> UPS Settings

Welcome admin | Logout English

UPS Settings

Enable UPS Support

- After the AC power fails for 5 minute(s), turn off the server.
- After the AC power fails for 2 minute(s), the server should enter standby mode. When the power resumes, the system resumes to the operation status.

UPS Model: APC UPS with SNMP Management

IP Address of UPS: 10 . 8 . 12 . 69 **Dirección IP del UPS**

UPS Information

UPS Brand: American Power Conversion
UPS Model: apc-snmp-ups
AC Power Status: Normal
Battery Capacity: --
Estimated Protection Time: --

APPLY

© QNAP, All Rights Reserved QNAP Classic

SNMP – QNAP NAS

- **SNMP**

- **SNMP en un QNAP NAS**

- SNMP on APC UPS

- SNMP on Windows PC

Recibiendo información desde el UPS

UPS Information

UPS Brand: American Power Conversion

UPS Model: apc-snmp-ups

AC Power Status: **Abnormal**

Battery Capacity: --

Estimated Protection Time: --

System Logs

SYSTEM EVENT LOGS SYSTEM CONNECTION LOGS ON-LINE USERS SYSLOG

All events Clear Save

Type	Date	Time	Users	Source IP	Computer name	Content
⚠	2009-08-06	16:09:07	System	127.0.0.1	localhost	UPS: The AC power is back!
⚠	2009-08-06	16:07:53	System	127.0.0.1	localhost	UPS: The AC power is down!
ⓘ	2009-08-06	16:07:25	System	127.0.0.1	localhost	[SNMP] has been enabled/modified
ⓘ	.....	16:04:57	System	127.0.0.1	localhost	Network connection resumes.
ⓘ	.....	16:04:54	System	127.0.0.1	localhost	Lan 1 link is Up.
⚠	.....	15:27:50	System	127.0.0.1	localhost	Network connection lost.
ⓘ	.....	15:27:49	System	127.0.0.1	localhost	Lan 1 link is Down.
ⓘ	.....	18:44:42	System	127.0.0.1	localhost	[SNMP] has been enabled/modified
ⓘ	.....	15:33:46	System	127.0.0.1	localhost	System started.
ⓘ	.....	21:28:14	System	127.0.0.1	localhost	System was shut down on Tue Aug 4 21:28:14 BST 2009.

There are 25 events. Displays 10 records per page. 1 / 3

SNMP – APC UPS

- **SNMP**

➤ SNMP on QNAP NAS

➤ **SNMP en un UPS**

APC

➤ SNMP on Windows PC

The screenshot shows the APC Network Management Card web interface. The left sidebar contains navigation options: Network Management Card (IP: 172.17.23.233), Smart-UPS 750, Events (Log, Actions, Recipients), Data, Network, System, Logout, and Help. The main content area is titled 'Event Recipients' and features a 'Trap Receivers' table. A red box highlights the 'Receiver NMS IP' field in the first row, with a red arrow pointing to it and the text 'IP Address of NAS' below. Below the table are 'Apply' and 'Cancel' buttons. The 'Email Recipients' section contains a table with columns for 'To Address', 'SMTP Server', 'Generation', and 'Format'. Below this table are 'Apply' and 'Cancel' buttons. The 'Email Test' section includes a 'To:' dropdown, 'DNS Server to Query:' dropdown, and 'Last Test Result:' text, with 'Apply' and 'Cancel' buttons at the bottom.

APC Network Management Card

APC
www.apc.com

Events

Event Recipients

Trap Receivers

Community Name	Receiver NMS IP	Generation	Authentication Traps
public	10.8.12.46	Enabled	Enabled
public	172.17.22.8	Enabled	Enabled
NASBB97BA	172.17.22.19	Enabled	Enabled
public	172.17.28.42	Enabled	Enabled

Apply Cancel

IP Address of NAS

Email Recipients

To Address	SMTP Server	Generation	Format
address@mycompany.com	Local	Enabled	Long
address@mycompany.com	Local	Enabled	Long
address@mycompany.com	Local	Enabled	Long
address@mycompany.com	Local	Enabled	Long

Apply Cancel

Email Test

To: Recipient 1

DNS Server to Query: Primary DNS Server

Last Test Result: No tests have been performed

Apply Cancel

SNMP – APC UPS

- **SNMP**

➤ SNMP on QNAP NAS

➤ **SNMP en un UPS**

APC

➤ SNMP on Windows PC

The screenshot shows the APC Network Management Card web interface. On the left is a navigation menu with options like 'Network Management Card', 'Smart-UPS 750', 'Events', 'Data', 'Network', 'System', 'Help', and 'Links'. The main content area is titled 'Event Recipients' and contains a table of 'Trap Receivers'. A red box highlights the 'Receiver NMS IP' field for the second 'public' entry, with a red arrow pointing to it and the text 'IP Address of SNMPc' below. Below this is an 'Email Recipients' section with a table of email addresses and SMTP servers. At the bottom is an 'Email Test' section with dropdown menus for recipient and DNS server, and a status message 'No tests have been performed'.

APC Network Management Card

APC
www.apc.com

Events

Event Recipients

Trap Receivers

Community Name	Receiver NMS IP	Generation	Authentication Traps
public	10.8.12.46	Enabled	Enabled
public	10.8.12.63	Enabled	Enabled
NASBB97BA	172.17.22.19	Enabled	Enabled
public	172.17.28.42	Enabled	Enabled

Apply Cancel

IP Address of SNMPc

Email Recipients

To Address	SMTP Server	Generation	Format
address@mycompany.com	Local	Enabled	Long
address@mycompany.com	Local	Enabled	Long
address@mycompany.com	Local	Enabled	Long
address@mycompany.com	Local	Enabled	Long

Apply Cancel

Email Test

To: Recipient 1

DNS Server to Query: Primary DNS Server

Last Test Result: No tests have been performed

Apply Cancel

SNMP – Windows PC

- **SNMP**

- SNMP on QNAP NAS

- SNMP on APC UPS

- **SNMP en Windows PC**
SNMPc



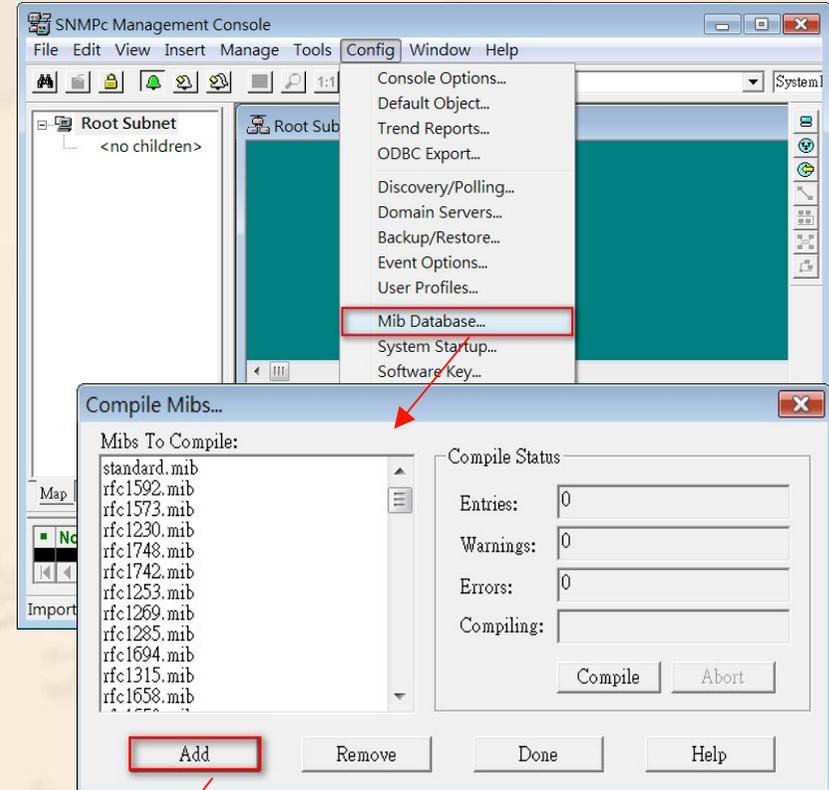
Paso 1 : Descargar el MIB file del NAS

Copiar NAS.mib hacia el folder mibfiles

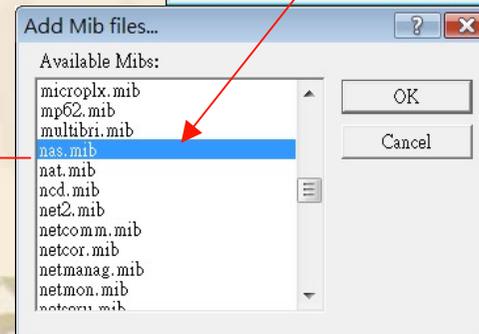
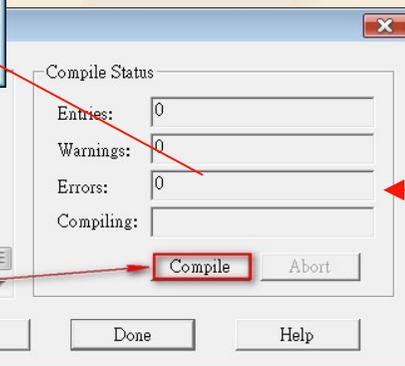
SNMP – Windows PC

- **SNMP**

- SNMP on QNAP NAS
- SNMP on APC UPS
- **SNMP en una PC Windows**



Paso 2 : Compilar MIB



SNMP – Windows PC

- **SNMP**

➤ SNMP on QNAP NAS

➤ SNMP on APC UPS

➤ **SNMP en una PC Windows**

Paso 3 : Activar Discovery

The screenshot shows the 'SNMPc Management Console' interface. The 'Discovery/Pooling Agents...' dialog box is open, and the 'Enable Discovery' checkbox is checked. A red arrow points from the 'Enable Discovery' checkbox to the 'Seeds' tab in the same dialog box. The 'Seeds' tab shows a list of IP addresses and netmasks, with '10.8.12.1/255.255.254.0' selected. The 'Discovery/Pooling Agents...' dialog box is also open in the background, showing the 'Discovery Config' section with 'Enable Discovery' checked.

Discovery/Pooling Agents...

Address	Status
localhost	connected

General | Proto | Seeds | Comm | Filters

Discovery Config

- Enable Discovery
- Use Subnet Broadcasts
- Ping Scan Subnets
- Auto Restart Time (hours): 1

Restart

Polling Config

- Enable Status Polling
- Enable Service Polling

Layout: Top Level/Complete

- Use full DNS name
- Enable Poll After Layout

Delete OK Cancel Help

Discovery/Pooling Agents...

General | Proto | Seeds | Comm | Filters

Seed IP Addr: 10.8.12.1

Seed Netmask: 255.255.254.0

10.8.12.1/255.255.254.0

10.8.12.63/255.255.254.0

Add Change Delete

Layout: Top Level/Complete

- Use full DNS name
- Enable Poll After Layout

Delete OK Cancel Help

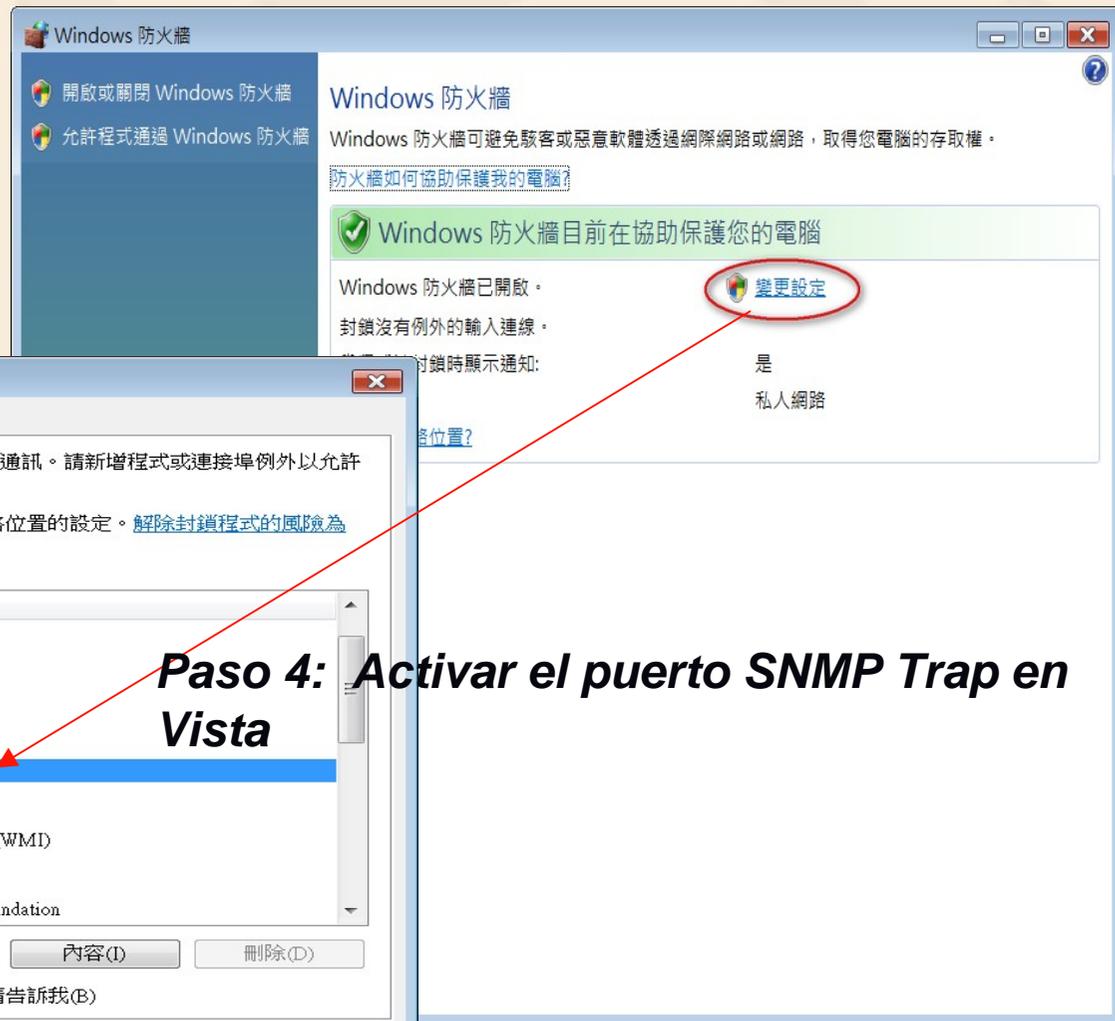
SNMP – Windows PC

- **SNMP**

- SNMP on QNAP NAS

- SNMP on APC UPS

- **SNMP en una PC**
Windows



SNMP – Windows PC

- **SNMP**

- SNMP on QNAP NAS

- SNMP on APC UPS

- **SNMP en una PC Windows**

Recibiendo la información desde el NAS de QNAP en el Programa de Administración SNMPc

The screenshot displays the SNMPc Management Console interface. The main window shows a tree view on the left with categories like SystemIfTable, SystemHdTable, SystemFanTable, and SystemInfoInfo. The central pane displays details for the system 'Linux TS-219e-Fran' (IP: 10.8.12.46), including CPU usage (32.4%), memory usage (249.7 MB total, 214.2 MB free), and uptime (0 days 03:37:19.45). A table below shows interface details for eth0 (ethernetCsmacd) and lo (softwareLoopback). The bottom pane shows a log of events, including 'Object Added by Discovery Agent' and 'Device Responding to Poll' for the device 10.8.12.46.

Index	Descr	Type	Mtu	Speed	WLAN Address	AdminStatus	OperSt
1	eth0	ethernetCsmacd	1500	10000000	00 50 43 3c 3b 5d	up	up
2	lo	softwareLoopback	16436	10000000		up	up

Index	Descr	PacketsReceived	PacketsSent	ErrorPacl
1	eth0	615107	433072	0

```
Info 08/06/2009 16:32:39 10.8.12.122 Object Added by Discovery Agent at 127.0.0.1: 10.8.12.122, Device, recno 40
Normal 08/06/2009 16:32:39 10.8.12.122 Device Responding to Poll
Info 08/06/2009 19:16:53 10.8.12.46 Object Changed by Administrator at 10.8.12.63: 10.8.12.46, Device, recno 40
Normal 08/06/2009 19:16:53 10.8.12.46 Device Responding to Poll
Minor 08/06/2009 19:18:49 10.8.12.46 EventInform [1] EventInformMsg.0 (DisplayString): [SNMP] has been enabled/modi
Minor 08/06/2009 19:23:39 10.8.12.46 EventInform [1] EventInformMsg.0 (DisplayString): [NFS Service] started succes
Minor 08/06/2009 19:26:33 10.8.12.46 EventInform [1] EventInformMsg.0 (DisplayString): [UPnP] has been disabled [2]
```

SopORTE por modelos

	Intel x86 (TS-x39/509/809)	Marvell 6281(TS- 119/219/219P)	Marvell 5182/5281 (TS-109/209/409/409U)
UPnP			--
Bonjour			
EXT 4			--
Virtual Disk			--
SNMP			--
Bitmap			--
RAID Recovery * (4 bay NAS or above)			--
IP Filter/Network Access Protection			
Port Trunking **		--	--

Nueva generación de **Servidores NAS** con prestaciones avanzadas para el sector profesional más exigente

QNAP
www.qnap.es

Obtenga el mejor rendimiento, la máxima capacidad y flexibilidad para su empresa a través de las múltiples posibilidades que le ofrece la gama profesional de servidores NAS de QNAP.

Los equipos TurboStation NAS soportan configuraciones RAID avanzadas para protección de datos con ampliación y migración del RAID en caliente.

Servicio de destino iSCSI, encriptación AES de 256 bits, acceso a FTP segura, Rsync, soporte Active Directory, compatibilidad con varios tipos de plataformas y una alta fiabilidad en múltiples aplicaciones simultáneas con un consumo reducido.



TS-809U-RP TS-439 Pro TS-639 Pro TS-509 Pro TS-809 Pro