

QNAP

QVR Pro

Use the QVR Pro
Developer Portal to
build a surveillance
video analytic system



The QNAP logo is located in the top left corner. It consists of the letters "QNAP" in a bold, white, sans-serif font. The background of the entire slide is a dark blue with a grid pattern and bright blue light streaks radiating from the center, creating a sense of depth and technology.

QNAP

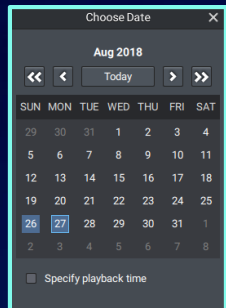
A professional surveillance solution from QNAP

QVR Pro Solution

The next-gen surveillance system - QVR Pro



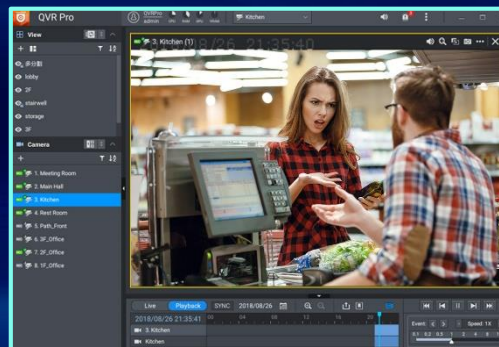
Recording search: then and now



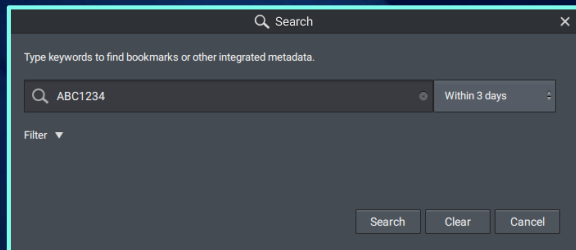
Knew the time



Knew the location



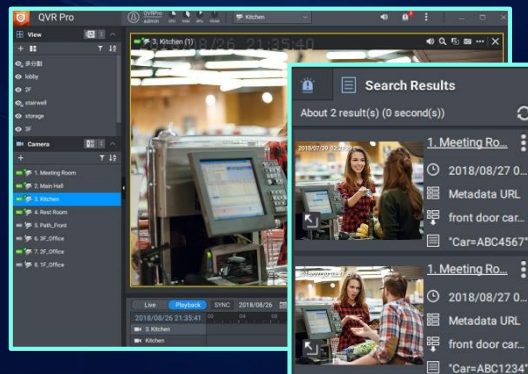
Then: To search the recording, time and place are prerequisites



Know the keyword



Approximate time frame



Now: Event driven recording search

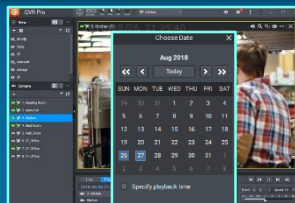
QVR Pro solves difficulties for 3rd-party developers

Third-party developers not only have to focus on the video analysis algorithms but also develop the surveillance storage software and client. Otherwise, it is hard to prove the practical value of analysis algorithms.

Data type



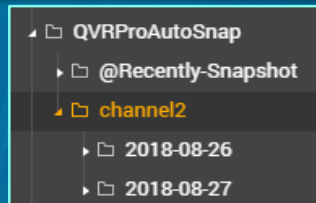
Recording



Playback of Client



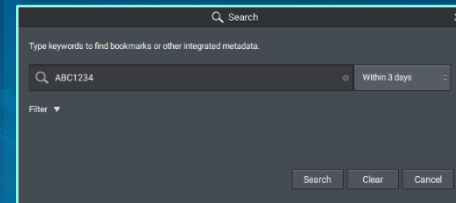
Snapshots



File Station



Text



Metadata Search

QVR Pro
Features

API Integration

Streaming Output API

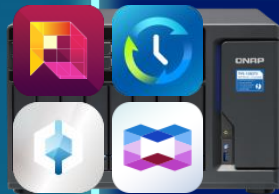
Samba / FTP

Metadata Vault API



QVR Pro solves difficulties for 3rd-party developers

Due to the limited bandwidth and complexity of device deployment, the hardware appliances must be easy to manage, and can be installed at multiple locations to perform independent video analysis .

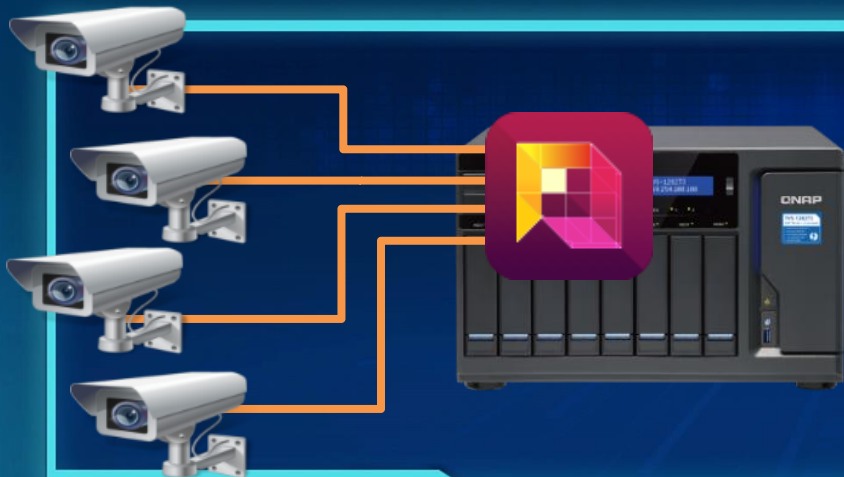


- Use myQNAPCloud and Q'center to monitor the heartbeat of multiple NAS instantly .
- Use Hybrid Backup Sync to backup important recordings to the central management system.
- Use Container Station or Virtualization Station to run third-party programs directly on the NAS , eliminating the need to upload the video to the cloud for analysis.



QVR Pro solves difficulties for 3rd-party developers

No resource to integrate different brands of cameras. Your software can only be based on the chosen (limited) camera models.



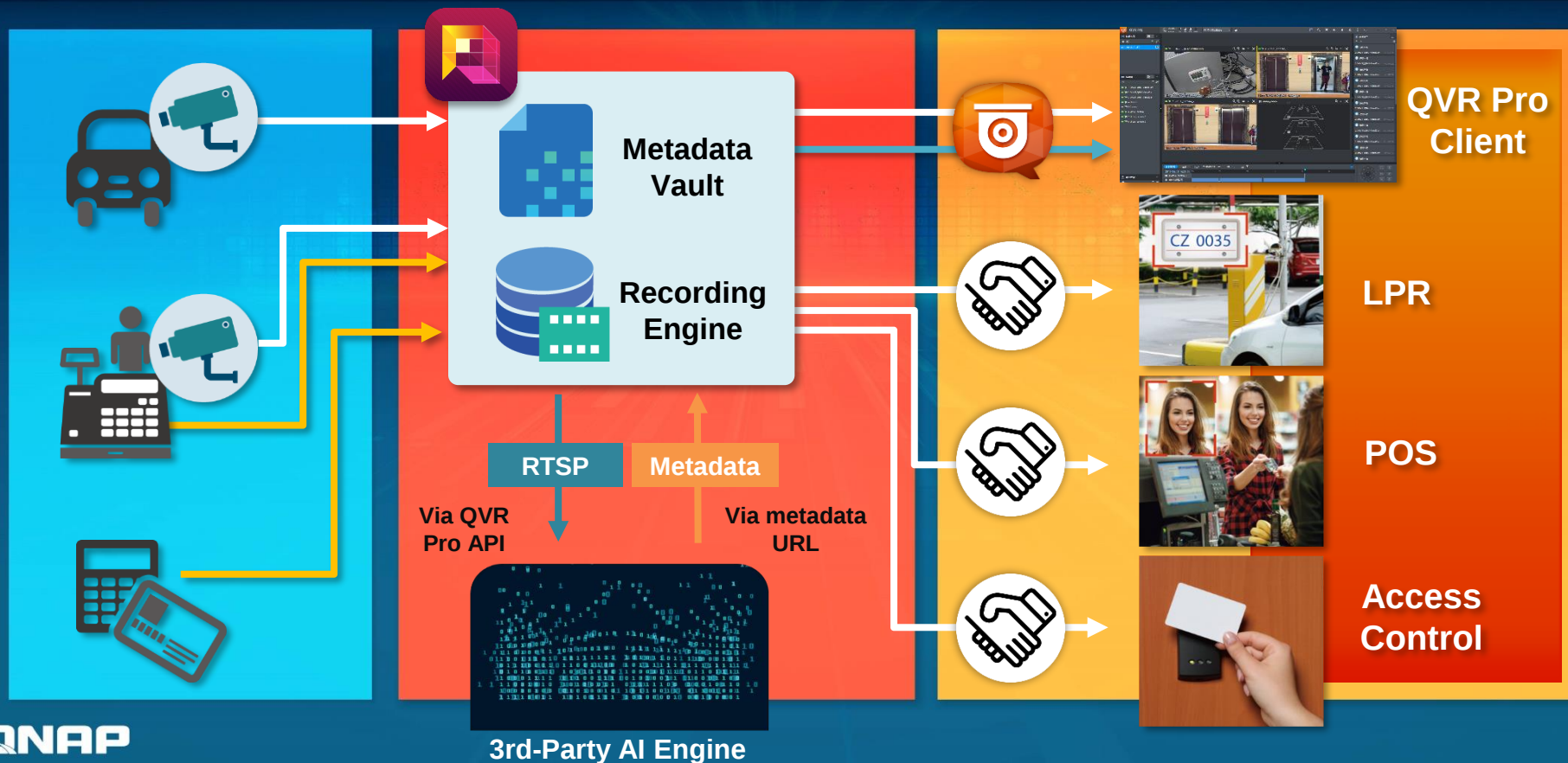
3-Party AI Engine

- QVR Pro is available with more than 200 brands and over 6,000 IP camera models.
- Support WebCam recording
- Developers only need to complete integrations with QVR Pro Streaming Output API for connecting with most major camera models.



QVR Pro saves the time and cost of camera stream integration

QVR Pro can search recordings by text



Agricultural scenarios



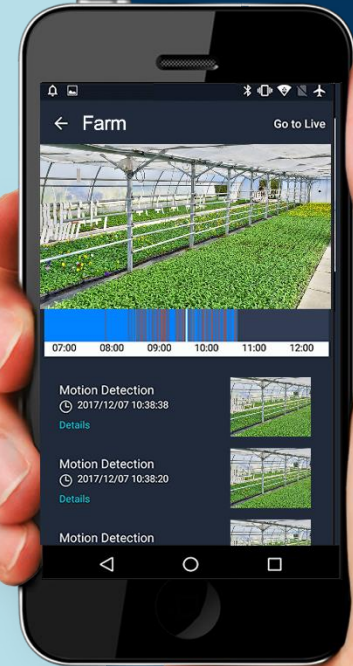
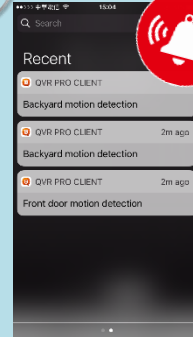
Analytical
laboratory

QVR Pro in the greenhouse

Auto-snapshot regularly to record the
growth curve of crop.

Detect illegal intrusions

Record the temperature



Manufacturing scenarios



QVR Pro in the factory

Record the process of components
and part numbers

Record technician's name

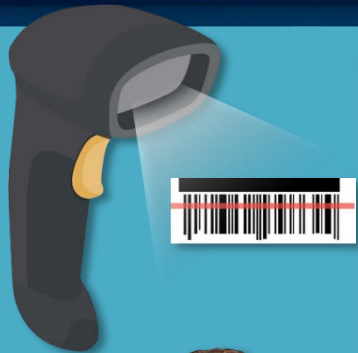
Playback the recordings

When the component is faulty and the production process needs to be traced, you just need to:

1. Enter the part number.
2. Playback the production recordings.
3. Clarify the root cause.



Retail scenarios



QVR Pro in the shop
Checkout details
(integrated with POS system)

Record cashier's name

Playback the recordings

When a consumer dispute occurs
(for example, change, goods
damaged), you just need to:

1. Enter the invoice number.
2. Playback the past recordings.
3. Clarify the problem situation.



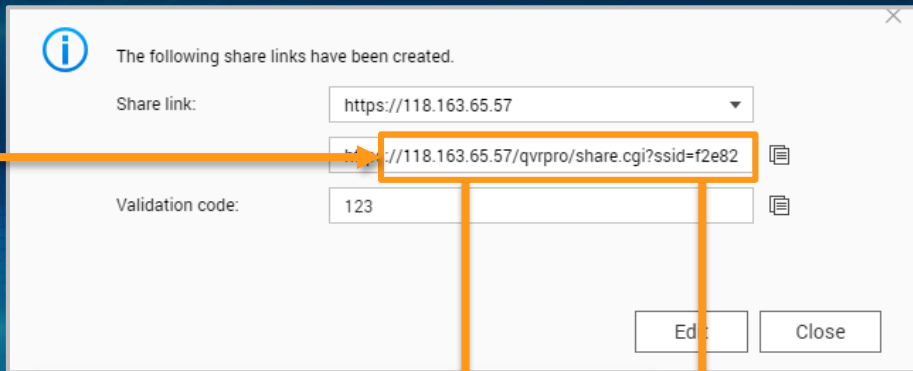
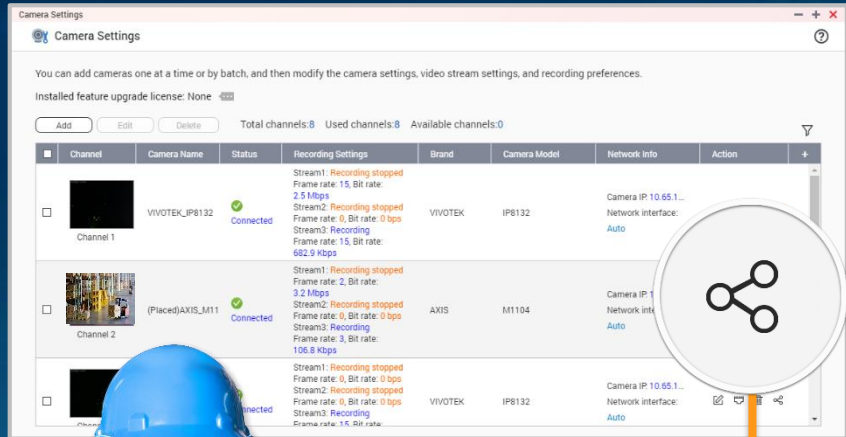
LIVE 

DEMO



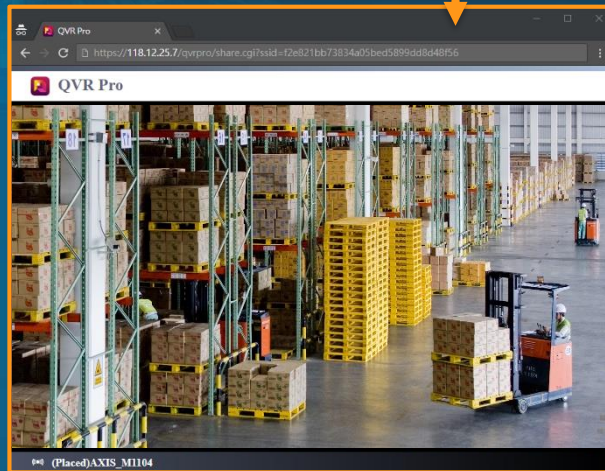
QNAP

Share the live view via HTTP, and watch it with your web browser



Share via HTTP

Share via RTSP



Share the live view via RTSP, and watch it with your VLC software

Camera Settings

You can add cameras one at a time or by batch, and then modify the camera settings, video stream settings, and recording preferences.

Installed feature upgrade license: None

Buttons: Add Edit Delete

Total channels: 8 Used channels: 8 Available channels: 0

Channel	Camera Name	Status	Recording Settings	Brand	Camera Model	Network Info	Action
Channel 1	VIVOTEK_IP8132	Connected	Stream1: Recording stopped Frame rate: 15, Bit rate: 2.5 Mbps Stream2: Recording stopped Frame rate: 0, Bit rate: 0 bps Stream3: Recording stopped Frame rate: 15, Bit rate: 682.9 Kbps	VIVOTEK	IP8132	Camera IP: 10.65.1... Network interface: Auto	
Channel 2	(Placed)AXIS_M11	Connected	Stream1: Recording stopped Frame rate: 2, Bit rate: 3.2 Mbps Stream2: Recording stopped Frame rate: 0, Bit rate: 0 bps Stream3: Recording stopped Frame rate: 3, Bit rate: 106.8 Kbps	AXIS	M1104	Camera IP: 10.65.1... Network interface: Auto	
Channel 3	VIVOTEK_IP8132	Connected	Stream1: Recording stopped Frame rate: 0, Bit rate: 0 bps Stream2: Recording stopped Frame rate: 0, Bit rate: 0 bps Stream3: Recording stopped Frame rate: 15, Bit rate: 682.9 Kbps	VIVOTEK	IP8132	Camera IP: 10.65.1... Network interface: Auto	

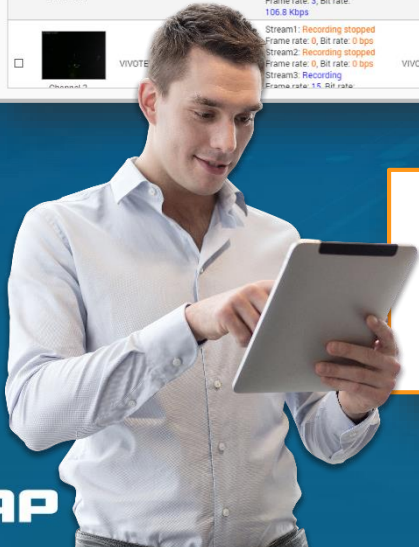
Share icon (three connected circles)

The following share links have been created.

Share link: 118.163.65.57

rtsp://118.163.65.57:10273/channel1

Edit Close



Share via HTTP

Share via RTSP

rtsp://118.163.65.57:10273/channel1 - VLC 媒體播放器

媒體(M) 播放(P) 音訊(A) 視訊(V) 字幕(T) 工具(S) 檢視(V) 說明(H)

00:11 100%

Use 3rd-party event URLs to trigger QVR Pro event rules.

The screenshot displays the QNAP Event Management web interface. A modal dialog titled "Add Event" is open, allowing users to configure a new event rule. The dialog is highlighted with a red border. In the background, the "Event Management" page is visible, showing a list of existing rules with columns for "Name", "Status", and "Operation".

Add Event

Type an event name, select an event type, and then select an event source. Only the available sources are displayed.

Name: Events List

Type: URL Event URL

An event URL is generated for each event source. You can use the event URL with a third-party interface to trigger QVR Pro. To easily differentiate events, use a unique source name for each event.

Event source name:

Note: To easily differentiate events, use unique source names.

Event URL: LAN IP

https://118.163.65.57/qvrpro/apis/logical_input.cgi?token=2F846C32D0E941

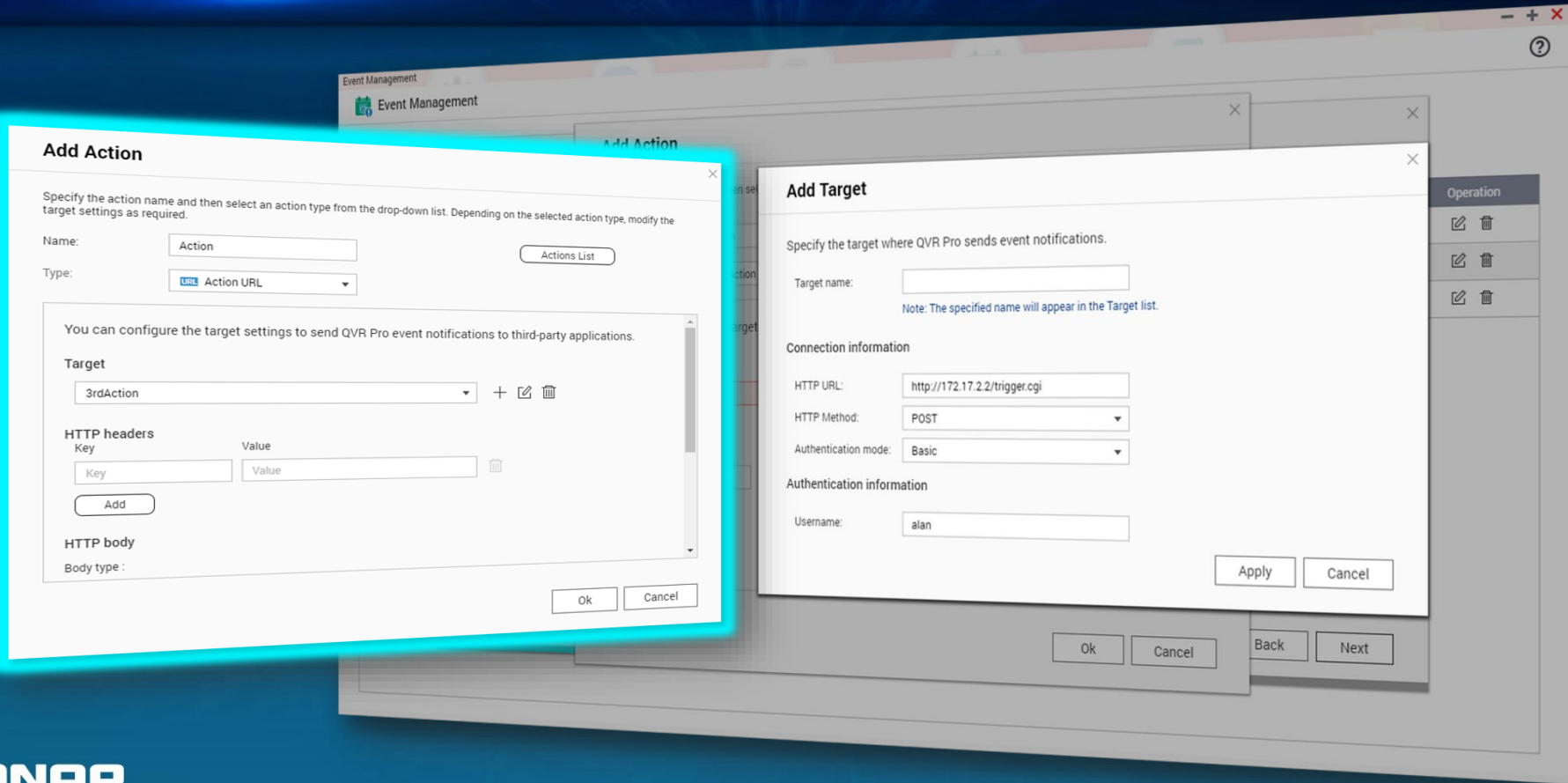
https://10.65.12.102/qvrpro/apis/logical_input.cgi?token=2F846C32D0E941

☐ All events must occur

Rule Thresholds

Cancel Ok Cancel

Use 3rd-party action URLs to trigger actions



Use Metadata URL to send data to QVR Pro



The image shows a man holding a laptop, with orange arrows indicating the workflow from the Metadata Vault interface to the 'Add Data Source' button and the 'Camera Pairing' dialog.

Metadata Vault - Data Source List

1. CST 2018-06-06 12:51: [Enable]

+ Add Data Source

Metadata Vault - Edit Data Source

Settings Metadata URL

You can copy and use the metadata URL to enable a third-party device to send its metadata to QVR Pro. Metadata can be used to search and play back a recorded video.

LAN IP [] ☒ Display secure connections

<http://118.163.66.57:8080/qvrpro/qvrp/Event/rec/notify/GENERIC/IDC00379894FD34808C03CDF8482F80F0>

<http://10.65.12.102:8080/qvrpro/qvrp/Event/rec/notify/GENERIC/IDC00379894FD34808C03CDF8482F80F0>

<https://118.163.66.57:443/qvrpro/qvrp/Event/rec/notify/GENERIC/IDC00379894FD34808C03CDF8482F80F0>

<https://110.66.12.102:443/qvrpro/qvrp/Event/rec/notify/GENERIC/IDC00379894FD34808C03CDF8482F80F0>

Apply Cancel

Metadata Vault - Camera Pairing

Select one or more cameras to pair with the data source front door card machine. After pairing the selected cameras will display the metadata from the data source front door card machine.

Selected cameras: 1

Camera Name	Brand / Model	IP Address	Preview
☒ VIVOTEK_IP8132	VIVOTEK / IP8132	10.65.13.20	
☐ (Placed)AXIS_M1104	AXIS / M1104	10.65.13.55	
☐ VIVOTEK_IP8132	VIVOTEK / IP8132	10.65.13.21	
☐ (Placed)VIVOTEK_IP8132	VIVOTEK / IP8132	10.65.13.22	
☐ Grandstream_GOV3651FHD	Grandstream / GOV3651F...	10.65.12.26	

One data source can be paired with multiple cameras, and one camera can be paired with multiple data sources.

Apply Cancel

Add data source to get the Metadata URL

Select the cameras to pair with the data source.

LIVE 

DEMO



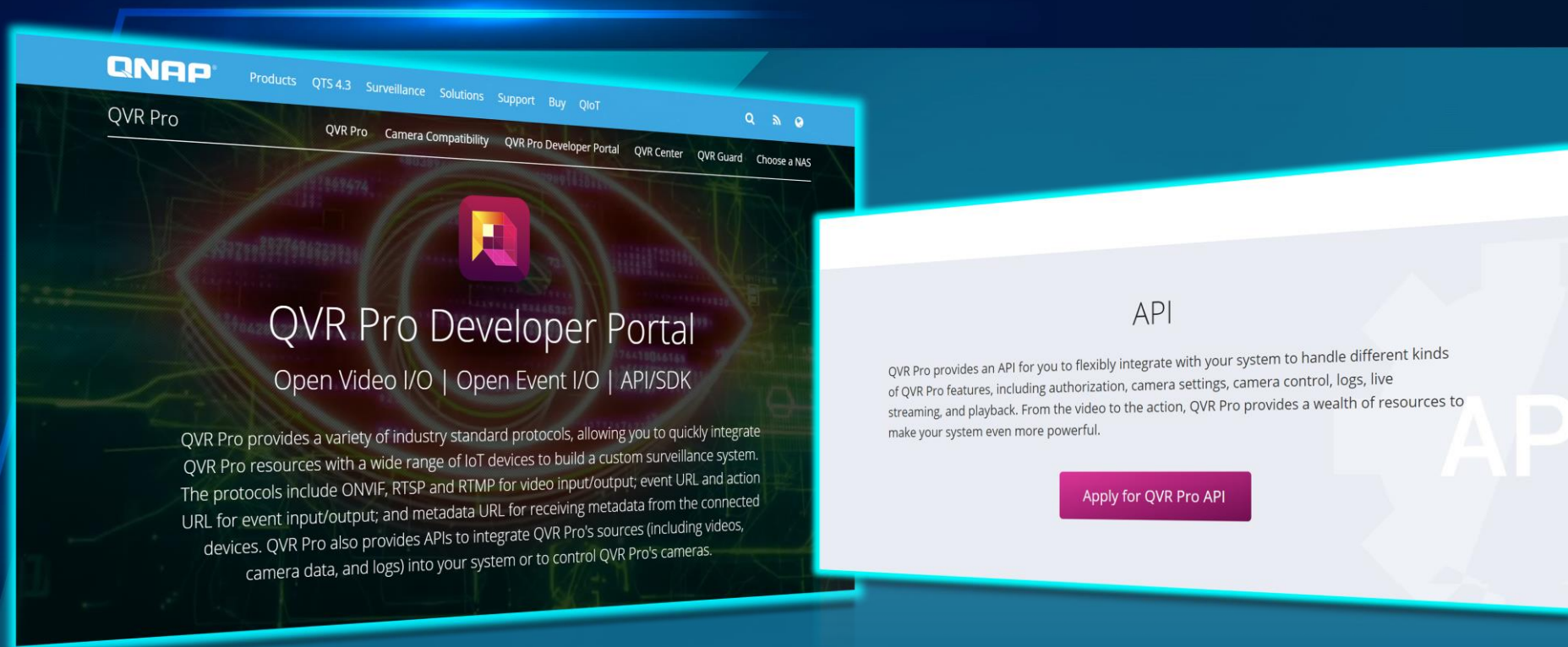
QNAP

QVR Pro SDK / API



	Used for
QVR Pro SDK	• Change the settings of QVR Pro • User authentication • Camera settings • Settings on the server side
Streaming Output API	Users can get live streaming easily, such as, RTSP, RTMP and HLS.
Metadata Vault API	Users can send the text data to QVR Pro and pair with the camera at any time. Then retrieve relevant recordings in QVR Pro Client later.

How to get QVR Pro SDK / API



The image shows a screenshot of the QVR Pro Developer Portal website. The top navigation bar includes the QNAP logo and links for Products, QTS 4.3, Surveillance, Solutions, Support, Buy, and QIoT. Below this, a secondary navigation bar lists QVR Pro, Camera Compatibility, QVR Pro Developer Portal, QVR Center, QVR Guard, and Choose a NAS. The main content area features a large heading "QVR Pro Developer Portal" with a subheading "Open Video I/O | Open Event I/O | API/SDK". A paragraph describes the portal's purpose: "QVR Pro provides a variety of industry standard protocols, allowing you to quickly integrate QVR Pro resources with a wide range of IoT devices to build a custom surveillance system. The protocols include ONVIF, RTSP and RTMP for video input/output; event URL and action URL for event input/output; and metadata URL for receiving metadata from the connected devices. QVR Pro also provides APIs to integrate QVR Pro's sources (including videos, camera data, and logs) into your system or to control QVR Pro's cameras." To the right, a section titled "API" explains that QVR Pro provides an API for flexible integration with various system features like authorization, camera settings, and live streaming. A prominent purple button labeled "Apply for QVR Pro API" is positioned below the text.

QVR Pro Developer Portal
Open Video I/O | Open Event I/O | API/SDK

QVR Pro provides a variety of industry standard protocols, allowing you to quickly integrate QVR Pro resources with a wide range of IoT devices to build a custom surveillance system. The protocols include ONVIF, RTSP and RTMP for video input/output; event URL and action URL for event input/output; and metadata URL for receiving metadata from the connected devices. QVR Pro also provides APIs to integrate QVR Pro's sources (including videos, camera data, and logs) into your system or to control QVR Pro's cameras.

API

QVR Pro provides an API for you to flexibly integrate with your system to handle different kinds of QVR Pro features, including authorization, camera settings, camera control, logs, live streaming, and playback. From the video to the action, QVR Pro provides a wealth of resources to make your system even more powerful.

[Apply for QVR Pro API](#)

1. Go to <https://www.qnap.com/solution/qvrpro-developer/>
2. Click "Apply for QVR Pro API"
3. Receive API document in your mail box.

QVR PRO

QVR Pro is the best surveillance solution choice