

## **AXIS Camera Plug-in Configuration**

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Support Note SN-IMC-1-015

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Restrictions    Public Document

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## 1 Overview

From CANape 17, there is a plugin "Vector Axis Network Camera" available for AXIS camera to compress the video stream with h264 compressor. In this way the size of the video data is efficiently reduced. This document contains the instructions for how to configure the AXIS camera and how to apply the camera plug-in in CANape.

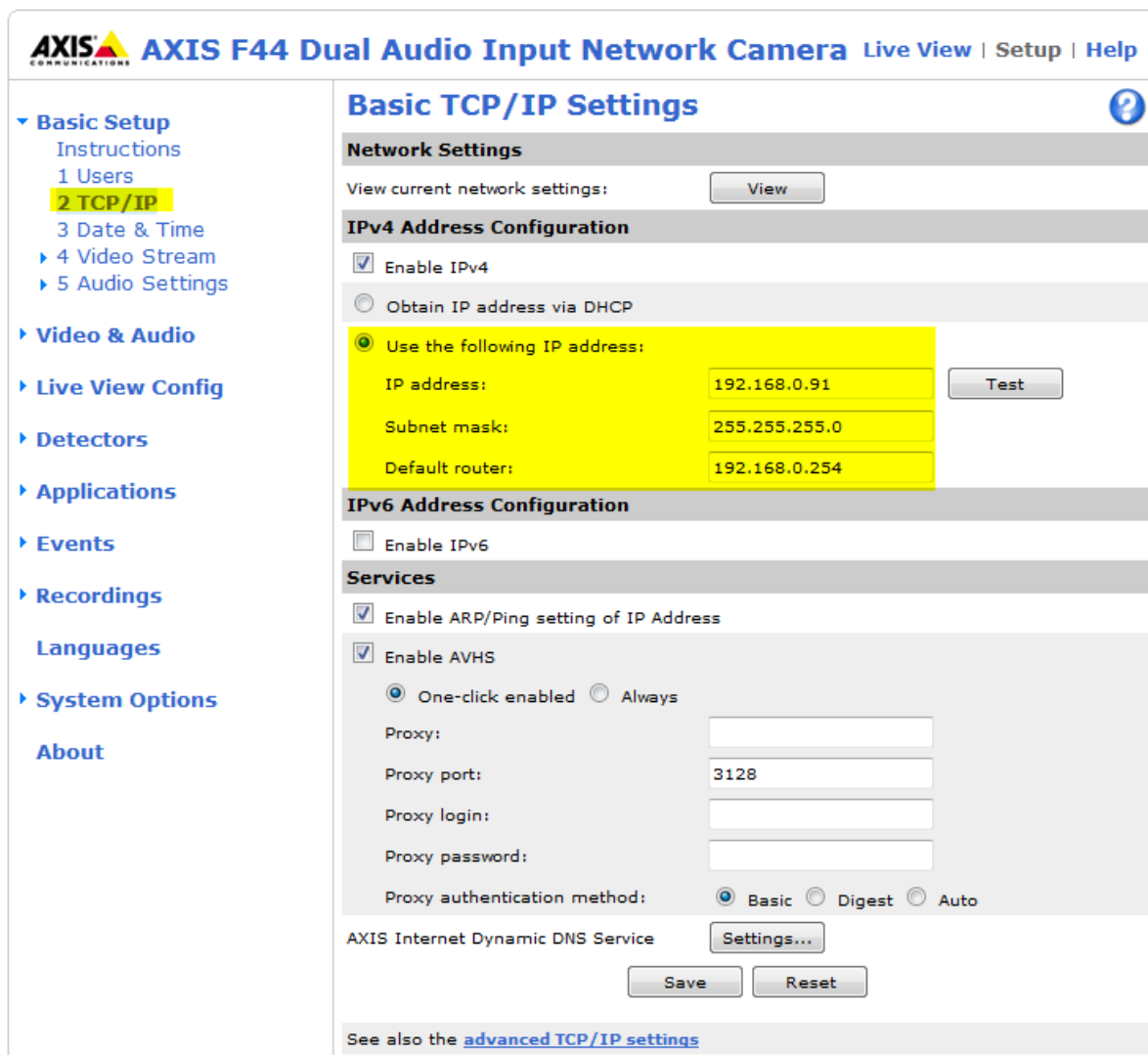
## 2 Preparation

### 2.1 Turn off firewall of the computer

### 2.2 Set the IP address of AXIS F44 main unit

The factory default IP address of AXIS F44 main unit is 192.168.0.90. You can open the IP address in your browser to configure the IP address as well as the cameras. The factory default user name and password are both "root".

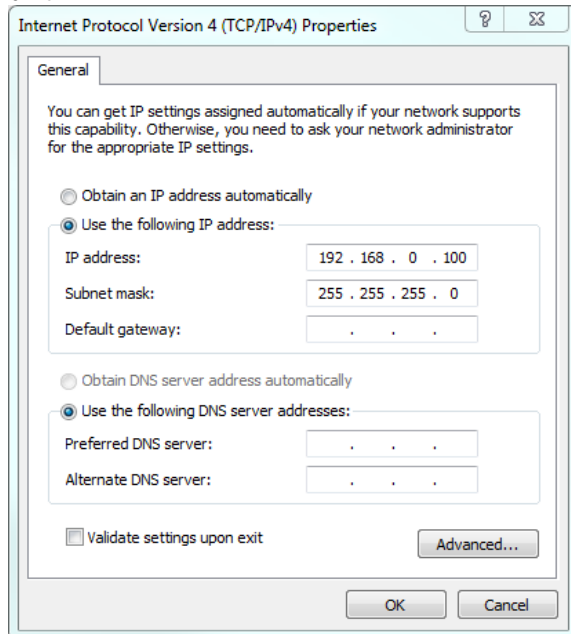
Go to **Basic Setup | 2 TCP/IP**. Here you can change the IP address for your cameras.



The screenshot shows the web interface of an AXIS F44 Dual Audio Input Network Camera. The page title is "AXIS F44 Dual Audio Input Network Camera" with links for "Live View", "Setup", and "Help". The left sidebar contains a navigation menu with the following items: "Basic Setup" (expanded), "Instructions", "1 Users", "2 TCP/IP" (highlighted in yellow), "3 Date & Time", "4 Video Stream", "5 Audio Settings", "Video & Audio", "Live View Config", "Detectors", "Applications", "Events", "Recordings", "Languages", "System Options", and "About". The main content area is titled "Basic TCP/IP Settings" and includes a help icon. It is divided into several sections: "Network Settings" with a "View" button; "IPv4 Address Configuration" with options to "Enable IPv4" (checked), "Obtain IP address via DHCP", or "Use the following IP address:" (selected and highlighted in yellow). The "Use the following IP address:" section contains fields for "IP address:" (192.168.0.91), "Subnet mask:" (255.255.255.0), and "Default router:" (192.168.0.254), along with a "Test" button. Below this is the "IPv6 Address Configuration" section with an unchecked "Enable IPv6" checkbox. The "Services" section includes checkboxes for "Enable ARP/Ping setting of IP Address" and "Enable AVHS". Under "Enable AVHS", there are radio buttons for "One-click enabled" (selected) and "Always". Below these are input fields for "Proxy:", "Proxy port:" (3128), "Proxy login:", and "Proxy password:". At the bottom of the services section are radio buttons for "Proxy authentication method:" with options "Basic" (selected), "Digest", and "Auto". At the very bottom of the main content area, there is a section for "AXIS Internet Dynamic DNS Service" with a "Settings..." button, and "Save" and "Reset" buttons. A footer note says "See also the [advanced TCP/IP settings](#)".

## 2.3 Change the IP address of network connection

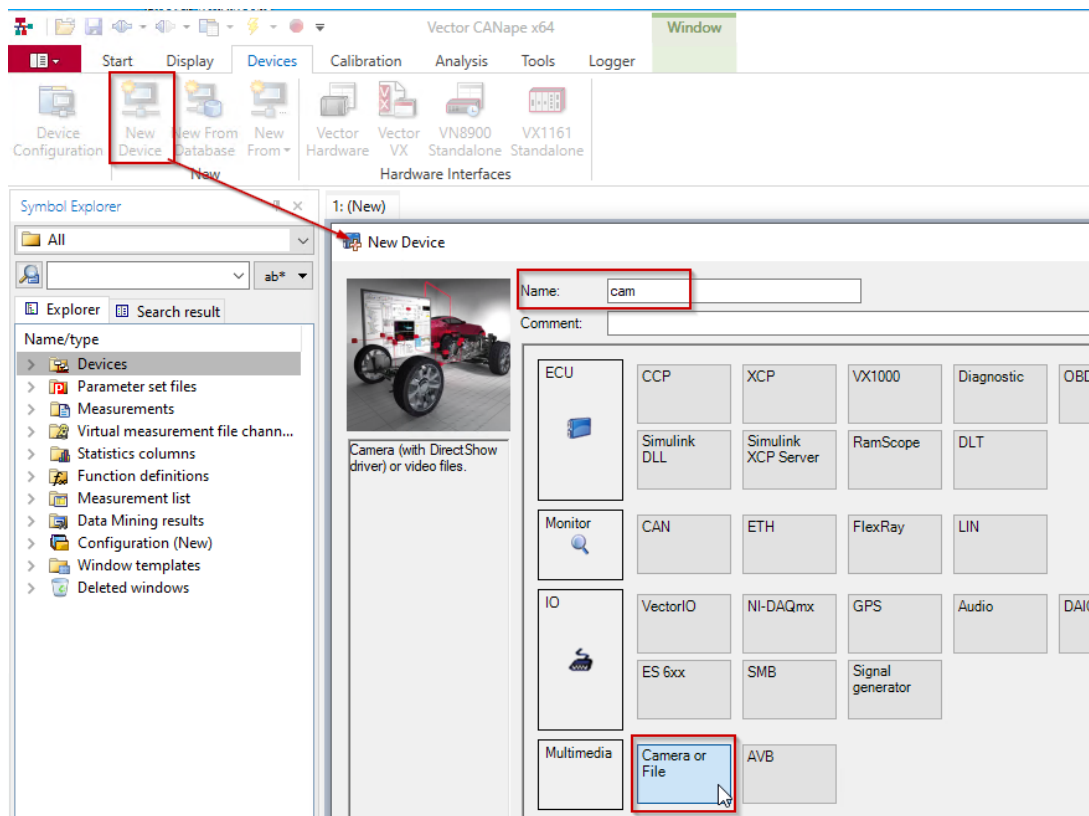
The Ethernet adapter of your computer needs to be changed according to the IP address of F44 main unit.



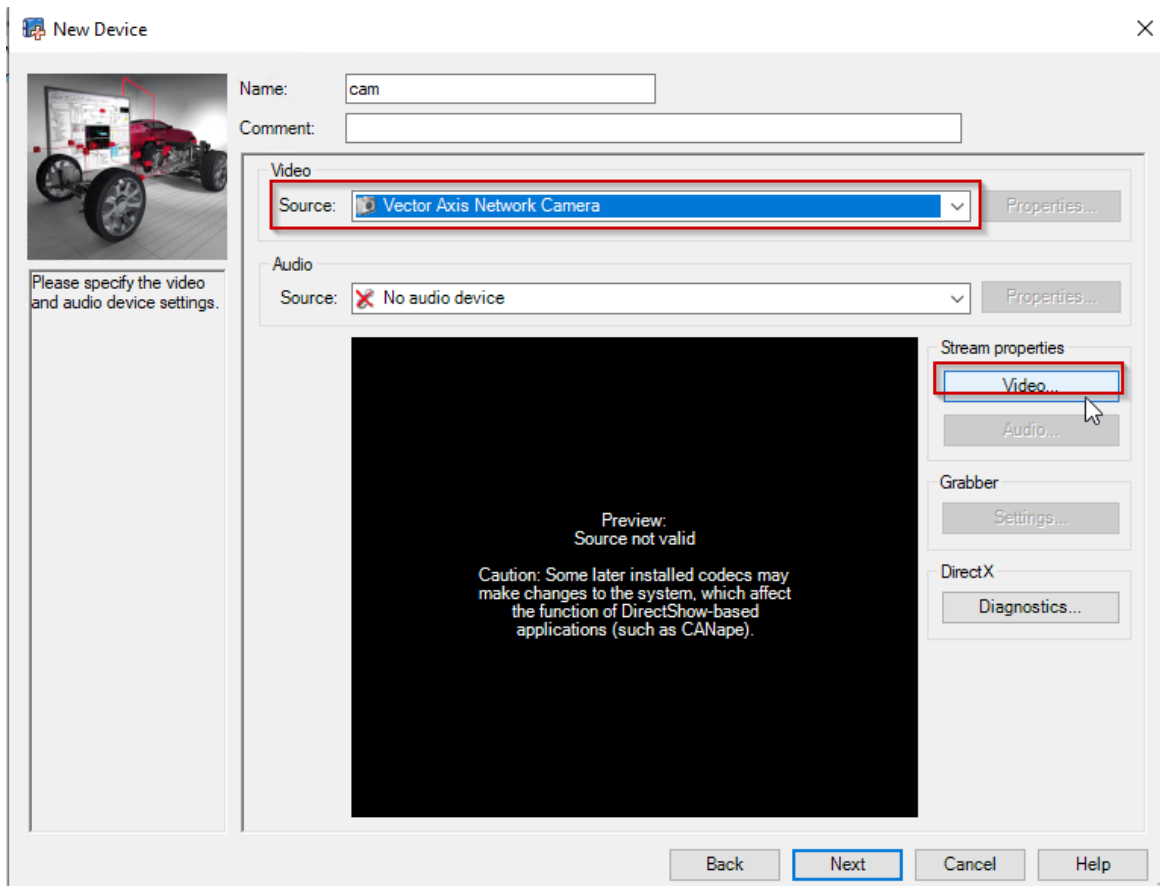
## 3 Configure camera plug-in in CANape

### 3.1 Open CANape

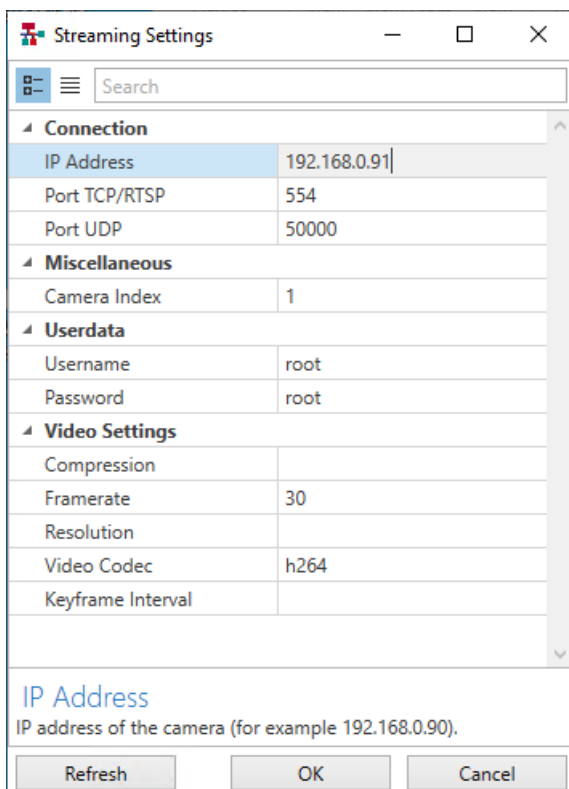
### 3.2 Add new device – camera



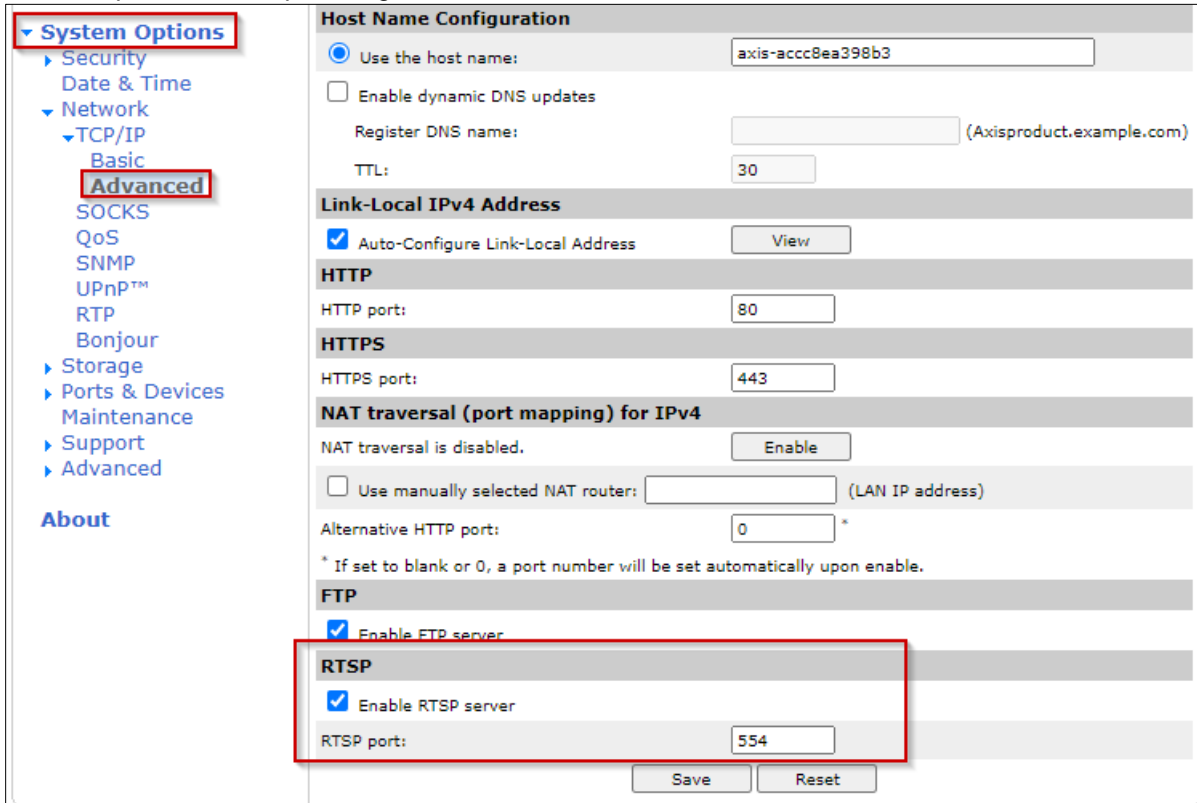
### 3.3 Choose the source “Vector Axis Network Camera”



### 3.4 Click the “Video” above to configure the plug-in



The TCP port and UDP port range can be found in the web interface:



**System Options**

- Security
- Date & Time
- Network
  - TCP/IP
    - Basic
    - Advanced**
  - SOCKS
  - QoS
  - SNMP
  - UPnP™
  - RTP
  - Bonjour
- Storage
- Ports & Devices
- Maintenance
- Support
- Advanced

**About**

**Host Name Configuration**

☒ Use the host name:

☐ Enable dynamic DNS updates

Register DNS name:  (Axisproduct.example.com)

TTL:

**Link-Local IPv4 Address**

☒ Auto-Configure Link-Local Address

**HTTP**

HTTP port:

**HTTPS**

HTTPS port:

**NAT traversal (port mapping) for IPv4**

NAT traversal is disabled.

☐ Use manually selected NAT router:  (LAN IP address)

Alternative HTTP port:  \*

\* If set to blank or 0, a port number will be set automatically upon enable.

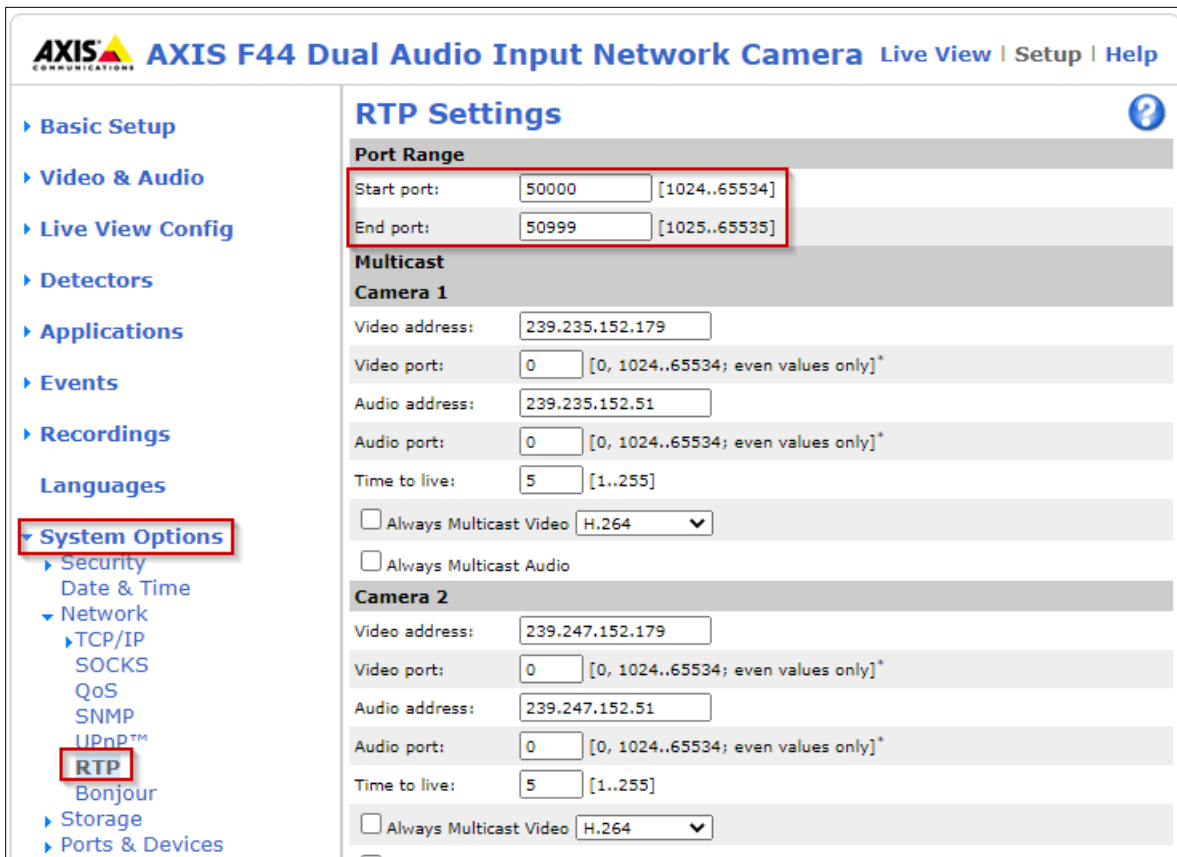
**FTP**

☒ Enable FTP server

**RTSP**

☒ Enable RTSP server

RTSP port:



**AXIS F44 Dual Audio Input Network Camera** [Live View](#) | [Setup](#) | [Help](#)

**RTP Settings**

**Port Range**

Start port:  [1024..65534]

End port:  [1025..65535]

**Multicast**

**Camera 1**

Video address:

Video port:  [0, 1024..65534; even values only]\*

Audio address:

Audio port:  [0, 1024..65534; even values only]\*

Time to live:  [1..255]

☐ Always Multicast Video H.264

☐ Always Multicast Audio

**Camera 2**

Video address:

Video port:  [0, 1024..65534; even values only]\*

Audio address:



Audio port:  [0, 1024..65534; even values only]\*

Time to live:  [1..255]

☐ Always Multicast Video H.264

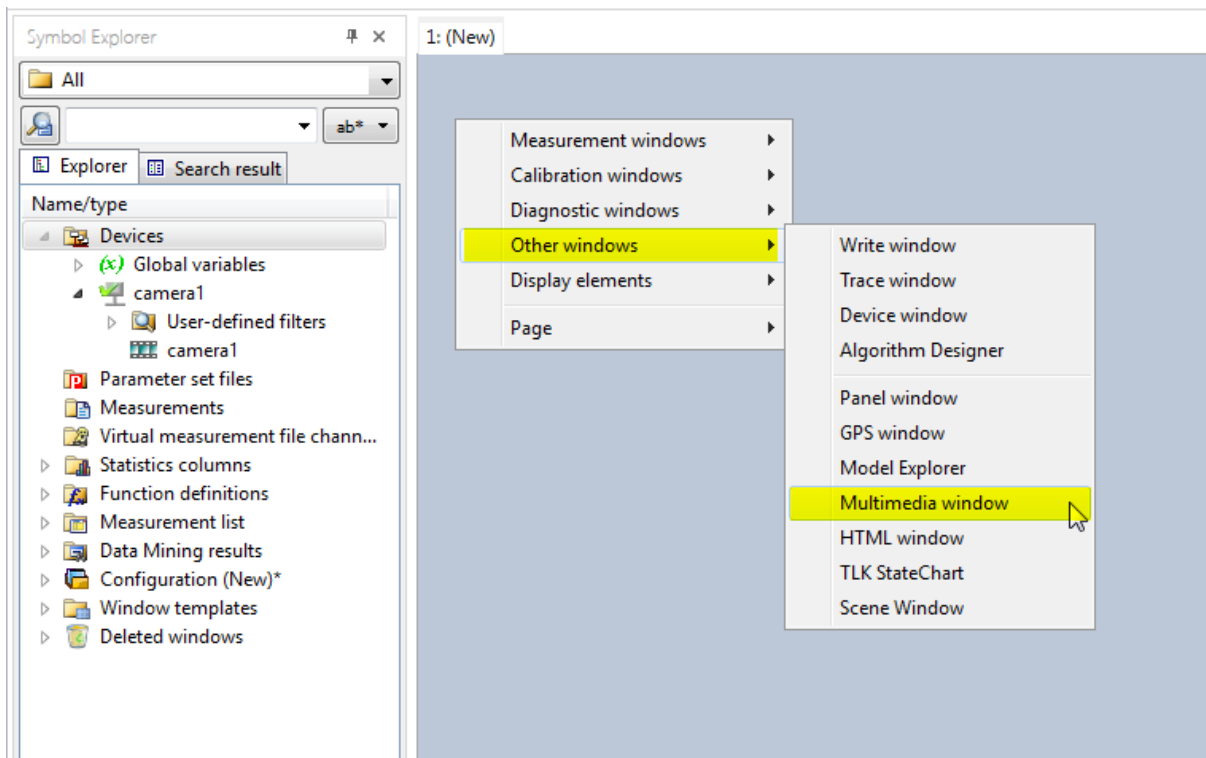
Please give every camera an unique UDP port. If you have more than one Axis main unit, please make sure every main unit has a unique IP address and for the cameras connected with different Axis main unit, they should also have different UDP ports.

For example, you have one Axis main unit with IP address 192.168.0.91, another Axis main unit with IP Address 192.168.1.91, the UDP port setting should be :

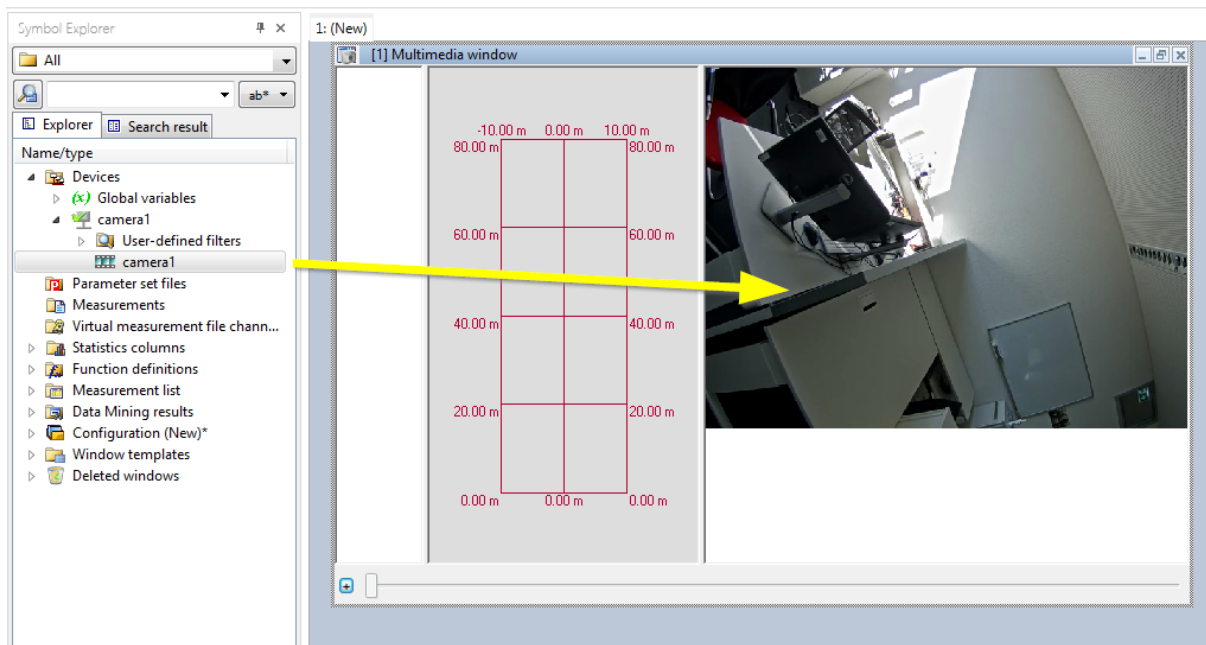
	<p>e.g. Camera1: IP 192.168.0.91  PortUDP: 50000  Camera: 1  Camera2: IP 192.168.0.91  PortUDP: 50001  Camera: 2  Camera3: IP 192.168.0.91  PortUDP: 50002  Camera: 3  Camera4: IP 192.168.0.91  PortUDP: 50003  Camera: 4  Camera5: IP 192.168.1.91  PortUDP: 50004  Camera: 1  ...</p>
	<p>Please do not use the same UDP port as other cameras, even though they have different IP addresses.</p>

After input of IP Address, Port TCP/RTSP, Port UDP, Camera Index, Username and Password, you can click **Refresh**. The the connection between CANape and Axis main unit should be established. The parameters under **Video Settings** should show up automatically. If there is no return value under **Video Setting**, it means there is no connection between CANape and the Axis main unit. Please check your firewall and network configuration again.

### 3.5 Create a multimedia window in CANape



### 3.6 Drag the camera1 from symbol explorer and drop it into the multimedia window

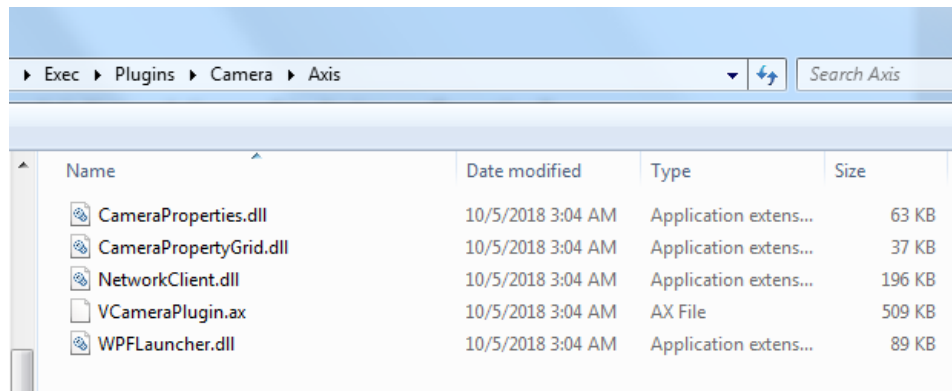


## 4 FAQ


### 4.1 I cannot find the option “Vector Axis Network Camera” in device configuration

Did you install the CANape of the correct version? Can you find the following files in the folder: CANape\Exec\Plugins\Camera\Axis? If not, you need to upgrade your CANape to the correct version or copy these files into the corresponding folder.

CANape 16:



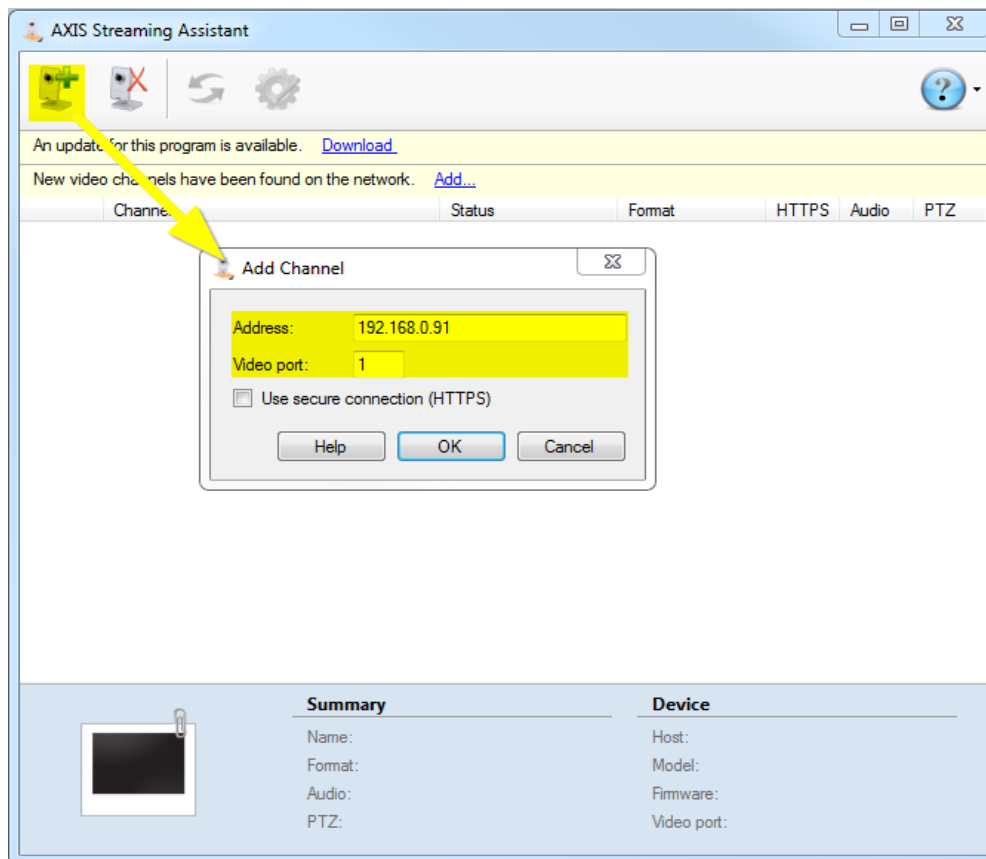
From CANape 17:

> Vector > CANape18SP2HF1 > Exec64 > Plugins > Camera > Axis			
Name	Änderungsdatum	Typ	Größe
 VCameraPlugin.ax	04.06.2020 11:12	AX-Datei	1.995 KB

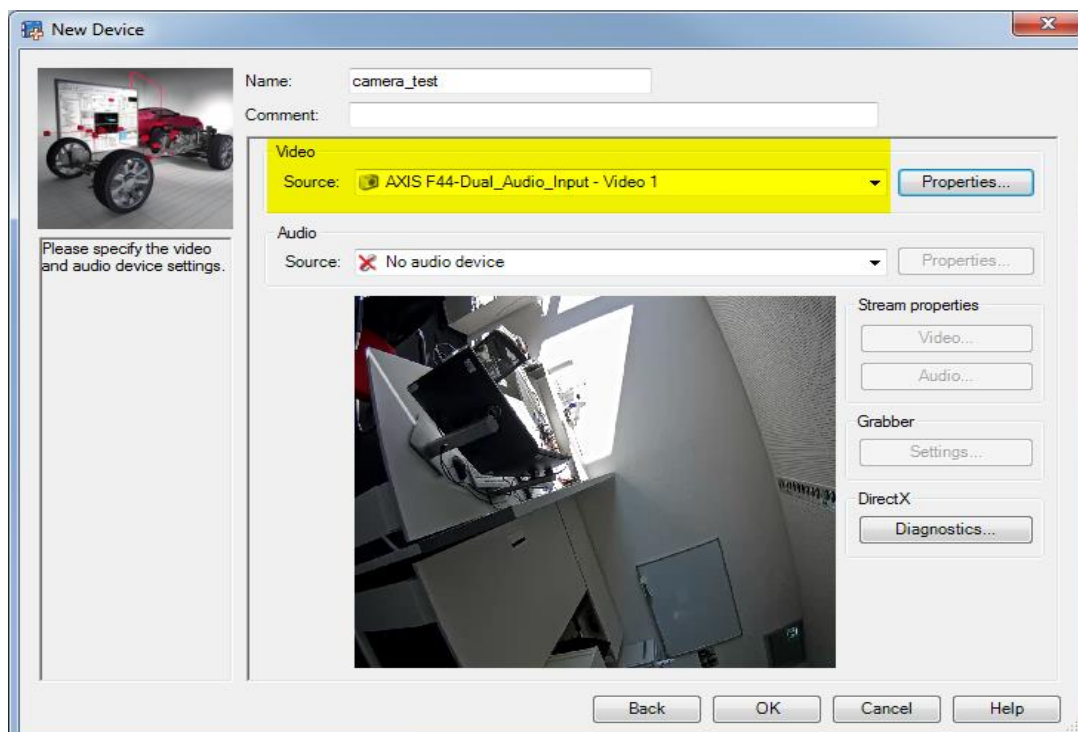
### 4.2 I cannot see the video image in CANape

(1) You can use AXIS Streaming Assistant to check whether you can see the video or not. Click **add new channel** and input the address and video port of your camera.

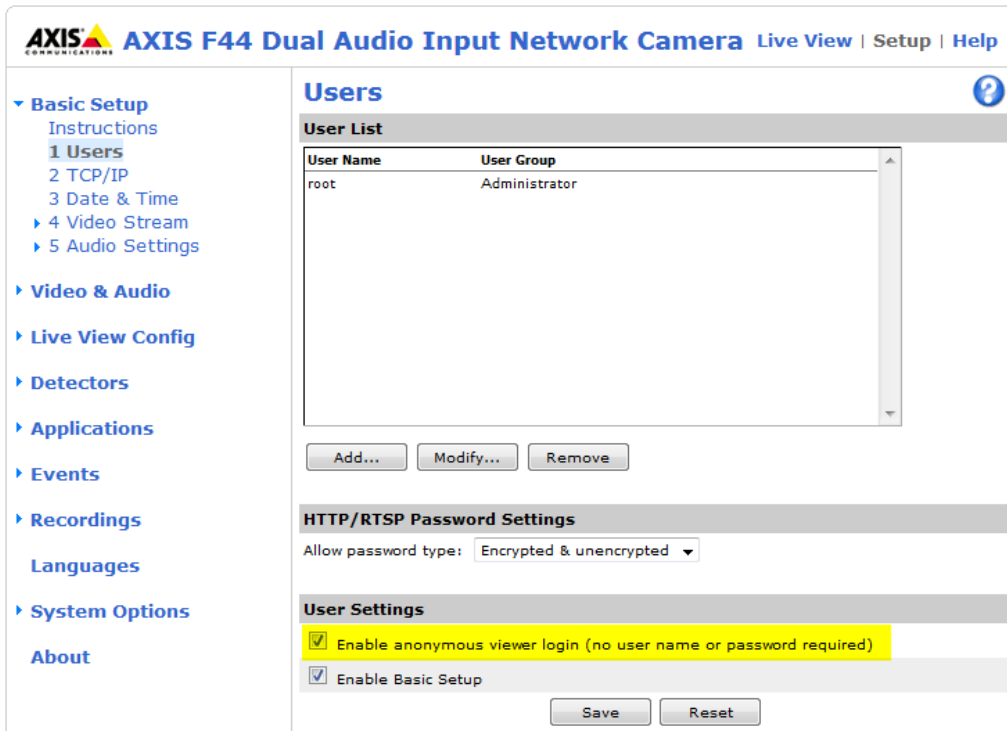




Then go back to CANape, choose the source "AXIS" for your camera.



(2) If you can see the video through AXIS Streaming Assistant but still no images in CANape through Vector plug-in, you can open the IP address in your browser, go to the **Basic Setup | Users** to check the configuration of your camera. Make sure that the option **Enable anonymous viewer login** is activated.



(3) Please check whether the firewall is off or not. After you connect the Axis camera in CANape and start a measurement, you can open Wireshark in parallel to check whether there are UDP packets coming. If you cannot see the UDP packets, it means the UDP might be blocked by a firewall. Please contact your IT department to turn the firewall off.

1.	50.630344	0.0.0.0	255.255.255.255	DHCP	378 DHCP Discover - Transaction ID 0xe1097a30
1.	53.710221	0.0.0.0	255.255.255.255	DHCP	378 DHCP Discover - Transaction ID 0xe1097a30
1.	54.575335	192.168.0.100	192.168.0.90	TCP	66 52829 → 554 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SACK_PERM=1
1.	54.575970	192.168.0.90	192.168.0.100	TCP	66 554 → 52829 [SYN, ACK] Seq=0 Ack=1 Win=29200 Len=0 MSS=1460 SACK_PERM=1 WS=32
1.	54.576132	192.168.0.100	192.168.0.90	TCP	66 52829 → 554 [ACK] Seq=1 Ack=1 Win=5536 Len=0
1.	54.838844	192.168.0.100	192.168.0.90	RTSP	285 DESCRIBE rtsp://192.168.0.90/axis-media/media.amp?video=h264&resolution=640x480&camera=1
1.	54.840110	192.168.0.90	192.168.0.100	TCP	60 554 → 52829 [ACK] Seq=1 Ack=232 Win=29216 Len=0
1.	55.076850	192.168.0.90	192.168.0.100	RTSP	1000 Reply: RTSP/1.0 200 OK
1.	55.077284	192.168.0.100	192.168.0.90	RTSP	313 SETUP rtsp://192.168.0.90/axis-media/media.amp?trackID=1?video=h264&resolution=640x480&camera=1
1.	55.077875	192.168.0.90	192.168.0.100	TCP	60 554 → 52829 [ACK] Seq=1003 Ack=491 Win=30272 Len=0
1.	55.323028	192.168.0.90	192.168.0.100	RTSP	285 Reply: RTSP/1.0 200 OK
1.	55.323295	192.168.0.100	192.168.0.90	RTSP	283 PLAY rtsp://192.168.0.90/axis-media/media.amp?video=h264&resolution=640x480&camera=1
1.	55.323852	192.168.0.90	192.168.0.100	TCP	60 554 → 52829 [ACK] Seq=1234 Ack=720 Win=30272 Len=0
1.	55.467459	192.168.0.90	192.168.0.100	RTSP	400 Reply: RTSP/1.0 200 OK
1.	55.474100	192.168.0.90	192.168.0.100	UDP	1442 50002 → 20004 Len=1400
1.	55.474102	192.168.0.90	192.168.0.100	UDP	1442 50002 → 20004 Len=1400

## 4.3 Axis FAQ

For specific questions related to the Axis cameras you can visit the Axis FAQ:

<https://www.axis.com/support/faq>

### AXIS F44 Main Unit User Manual

[https://www.axis.com/files/manuals/um\\_f44\\_1503728\\_en\\_1607.pdf](https://www.axis.com/files/manuals/um_f44_1503728_en_1607.pdf)

## 5 Contacts

For support related questions please address to the support contact for your country

<https://www.vector.com/int/en/company/contacts/support-contact/>.