Axis IP Cameras Installation and Usage Guide

Contents

Overview

Axis enables a smarter and safer world by creating solutions for improving security and business performance. As a network technology company and industry leader, Axis offers solutions in video surveillance, access control, intercom, and audio systems. They are enhanced by intelligent analytics applications and supported by high-quality training.

Axis has around 4,000 dedicated employees in over 50 countries and collaborates with technology and system integration partners worldwide to deliver customer solutions. Axis was founded in 1984, and the headquarters are in Lund, Sweden

Features

- Integrate Axis cameras into Control4
- If an IP camera contains multiple image sensors, you can specify the sensor you want the driver to access
- You can specify the resolution you want the driver to provide to Control4's UIs
- The driver can receive events preconfigured in the camera like motion events which you can program against
- Push Notifications with Snapshots
- PTZ Control
- Supports PTZ & Non PTZ Cameras
- View live camera stream on Control4 interface
- PTZ control (Up, Down, Left, Right, Zoom)
- Control4 Push Notification Snapshot Support (push notification photos to mobile phones)
- Live Events

FAQ

What cool functions can we do with this driver?

- This driver provides the ability to attach snapshots to Control4 Push Notifications (4sight required). Tie this in with the camera's motion events and your customer can get notified (with an image) if the camera detections motion
- This camera provides live feedback of events which is useful if you want to tie in lighting to motion and other events

Can I access cameras physically connected to an appliance, such as the S20 series?

No. Unfortunately, the ports on the back of an appliance are not reachable via the rest of the network.

What products will this work for?

This will work with Axis Communications range of IP cameras that support the Vapix version 3. Usually firmware version 5.40 onwards support. Please test prior to licence purchase.

I have received one of the following error messages:

Message	Explanation
No binding id provided. Cannot engage binding...")	The driver is trying to trigger a binding that doesn't exist. You should press Actions > Clear Bindings, then Add Recipient and Create Bindings
Received a non-number timer value. Cannot engage binding...(?) (#)	The driver is trying to trigger a binding that doesn't exist. You should press Actions > Clear Bindings, then Add Recipient and Create Bindings
Received invalid ID (#) Cannot remove request...")	Driver cannot remove a Recipient from the camera. If the driver can't receive events from the camera, remove the driver and re-add it
Failed to remove recipient:	The camera is refusing to remove the recipient. Try again later or log into the camera and manually remove the Recipients that are no longer required
Cannot add recipient as there the 'Webserver url' Property is empty")	The driver cannot stand up the server to receive events from the camera. Try rebooting the controller or re-adding the driver
Cannot remove invalid id=(#)	Driver cannot remove a Recipient from the camera. If the driver can't receive events from the camera, remove the

Message	Explanation
	driver and re-add it
Last Response ERROR: transfer failed. #errMsg# (#errCode#)	The attempt to connect to the device failed. Check the network and the IP/Credentials
Event Handling Server Server failed to be created with error:	The driver cannot stand up the server to receive events from the camera. Try rebooting the controller or re-adding the driver
Event Handling Server is offline... Trying to stand it up in X seconds')	This is usually only seen when the controller is rebooting or the driver is being initially configured. If you see this any other time, there may be an issue with the controller
NO ConfigID collected. cannot process message from the camera. Hopefully this is a test but we will probe the camera for Rules that use this driver's Recipient	If the driver receives a connect that contains no data or unexpected data, you will receive this message
Unhandled Proxy Message:	The controller will from time to time make calls to the driver that we don't need to respond to. In these cases, the driver will log an error which can be

Pre-requisites

- If you wish to use this driver to trigger C4 programming with Axis Rules, the C4 controller needs to be assigned a static IP address
- The camera needs to be on a network switch. It cannot be physically connected to an Axis appliance such as the S20 series

Configure Driver to Display Stream in Control4

1. Load the **Axis IP Camera** *Static/PTZ* **Driver (Chowmain)** driver in to the project via Composer
2. Enter the **Hostname / IP Address**
3. Change the **HTTP Port:** if required
4. Change the **HTTPS Port:** if required
5. Change the **RTSP Port:** if required
6. Make sure **Required** is ticked
7. Set the **Username:** *NOTE: Axis cameras use **root** not **admin**
8. Set the **Password:**
9. Set Type: to **Digest**
10. Set the following for the RTSP and Snapshot settings:
    - **Camera** if the physical device has more than one camera sensor, you can select your preferred sensor here
    - **Codec** *Core controller OSDs, T4s and mobile apps can render H265. EA series OSDs, T3s and Composer tests can only handle H264*
    - **Color**
    - **RTSP Resolution** *Auto will request the camera to provide the stream resolution specified by the C4 UI. The list is the available resolutions provided by the camera that you can force the driver to use*
11. Run the Camera Tests and confirm they work
12. Refresh Navigators

Configure Driver to Receive and Process Events

Only complete the following after you have confirmed that the Camera Tests pass

Driver - Config Camera Steps

1. Select the Actions tab
2. Press **Add Recipient** - This will add a Recipient to the camera that you can then use as Recipient for the **Action** - **Send notification through HTTP**
3. Press **Build Bindings**
4. Check the Lua output tab for further instructions

Camera WebUI - Config Steps

If you haven't set up a Rule to connect to this driver then proceed

1. Log in to the camera
2. Navigate to Settings
3. Select the System tab
4. Click the Events icon
5. Select Device event > Rules
6. Select the 'plus' symbol and configure a **New Rule** using:
    1. Action **Send notification through HTTP**
    2. Recipient using **C4 Controller #####**
    3. Set the **Message** to something simple like **message_action**

7. Then return to the driver
8. Press **Actions** > **Create Bindings** button again

Driver - Programming Steps

Once a Rule has been created in the camera and pressing **Create Bindings** displays "Added Bindings for Rules", then proceed to the following steps

1. Search for a **Motion Sensor** under the **My Drivers** tab in **System Design** section
2. Make a binding between the driver and the **motion sensor** in the **Connections** section
3. Add the required programming to the **motion sensor** driver

Programming

1) Add a **Motion Sensor** driver from **System Design** > **My Drivers** tab

2) Go to the **Connections** section

3) Select your camera driver and confirm you have bindings listed under **Control Outputs**

Control & Audio Video Connections				
Axis IP Camera PTZ				
Name	Type	Connection	Input/Output	
Control Outputs				
HOLA	Control	CONTACT_SENSOR	Output	
AXIS_VMD_4	Control	CONTACT_SENSOR	Output	

4) Select a binding and make a connection to the motion sensor you just added

Control & Audio Video Connections				
Axis IP Camera PTZ				
Name	Type	Connection	Input/Output	Connected To
Control Outputs				
HOLA	Control	CONTACT_SENSOR	Output	
AXIS_VMD_4	Control	CONTACT_SENSOR	Output	axisMotion Sensor->Contact Sensor

5) Now select the **Programming** tab

6) Select your motion sensor from the **Device Events** list on the left

7) Select **When the** *motion sensor name* **senses motion**

8) Now locate your preferred Actions from the right section

Below we have added a Push Notification to be sent

Programming

Device Events

⊞ 🖥 axisMotion Sensor
⊞ 🄲 Axis IP Camera PTZ

axisMotion Sensor Events

🔘 When the axisMotion Sensor senses motion

⚪ When the axisMotion Sensor stops sensing motion

Script

Script

When the Room->axisMotion Sensor senses motion

Programming Controls

| ⤨ Else | & And | ❘ Or | ➡ Break | ➡ Stop | ➡ Delay | 5 | seconds ⌄ |

| # Comment | |

Script Actions

➡ Send Push Notification "Motion Detected"

Push Notification

Motion Detected   [Send Push Notification]

Category   Security ⌄
Severity   Alerts ⌄
Subject   Motion Detected
Attachment [   ] [Add...]
Message

Select an attachment...   ✕

Select an attachment to be added to the notification:

⊟🄲 Core1 Justin
 └ ⊟🏠 Home
    └ ⊟🏠 House
       └ ⊟🗔 Main
          └ ⊟🛡 Room
             └ ⊟🄲 Axis IP Camera PTZ
                └ 🄲 Current Snapshot
          └ ⊞🛡 Theatre

[OK]   [Cancel]

Licensing

- How does the trial period work?

  All Chowmain drivers are free to use for a set trial period. When the trial expires the driver will cease to function until you purchase a licence and apply it to the driverCentral project.
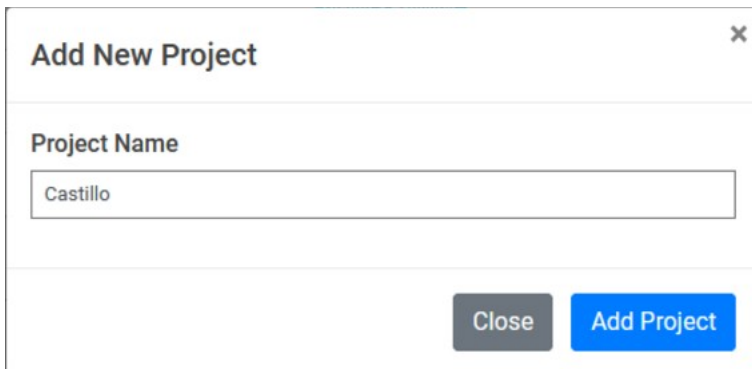
- Where do I buy a Licence from?

  This driver is developed by Chowmain software & Apps and is distributed by driverCentral, Inc
  https://www.drivercentral.io/chowmain-ltd

  To purchase a driver:

    1. On driverCentral, purchase a license and register it to your project

    2. If the driver is not already installed in your project, download it and install it

    3. If necessary, use the cloud driver's Action: "Check Drivers" to force the licence to download into the project

Creating a Project on Driver Central

1. Visit http://www.drivercentral.io

2. Log into your driver Central dealer account

3. Click **Portal**

4. Click **New Project**

5. Enter the project name

6. Click **Add Project**

7. Click on the project we just created

Project	Status	Created
🏠 Castillo	Unassigned Project	1999-12-31 23:59:56

8. Take note of the **Project Token** as this will be used later when we install the Cloud Driver

Castillo ✏️

Project Token:
ABCDEFG012

MAC:
000FFF123456

IP:
1.2.3.456

Connection Status:
Offline

Last Seen:

Actions:
+ 🔗 🗑️

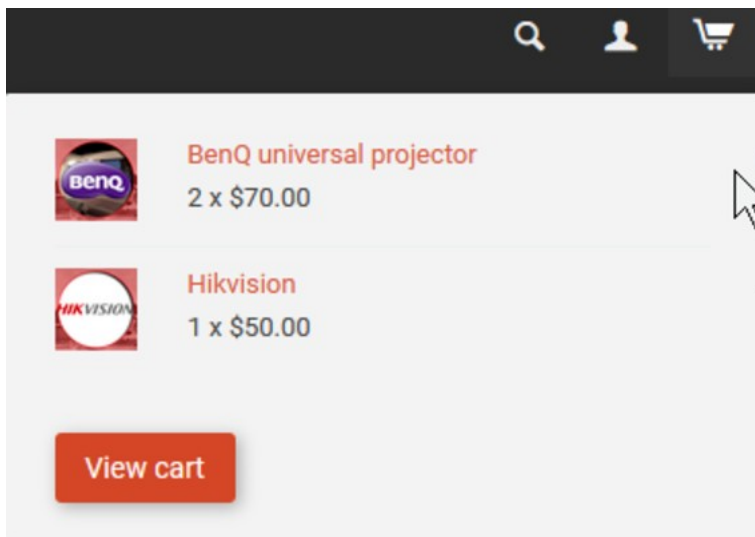There are no drivers attached to this project.

Close

9. Click **Close**

Purchasing a Driver Licence

1. Visit https://www.drivercentral.io/chowmain-ltd/ and find the product/driver you want to purchase a licence for

2. Click on **Add to Cart**

ADD TO CART

3. Now click the shopping cart icon (top right) and click **View cart**

BenQ universal projector
2 x $70.00

Hikvision
1 x $50.00

View cart

4. Confirm that your order is correct and click on **Proceed to checkout**

Proceed to checkout

5. Choose your payment option, provide the relevent details and click **Place order**

Checkout

PayPal
Paypal, or Credit Card...

Credit Card
Visa, Mastercard, etc...

☐ Select this check box to accept the Terms and Conditions
☐ Subscribe to our newsletter

Place order ($190.00)

6. You will now be at a page where you can see your purchased licence

License Name ⇕	License Key ⇕	Project Assigned ⇕	Action ⇕
▬▬▬▬▬▬▬			Assign to Project

7. From here assign the licence to the project we created or if you did not follow that step create a new project

License Assignment for
221

Assign License to Existing Project

Select Existing Project:

New Project (enter project name below) ▾

Or...
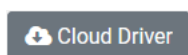
Create a new project

Enter New Project Name

Enter email for Installer Notifi

Are you sure you want to do this?

Assign License to Project?

Install the driverCentral cloud driver

1. Visit http://www.drivercentral.io

2. Log into your driver Central dealer account

3. Click **Portal**

4. Click **Cloud Driver**

☁ Cloud Driver

5. Copy the C4Z driver to My Documents\Control4\Drivers directory

6. Add the driver to your project

7. Click on the driver to view it's properties

Cloud Status	Please enter cloud project token below...
Project Information	(1) Total, (0) Licensed, (0) Trials, (1) Expired, (0) Updates.
Driver Version	1001
Project Token	
	Project token from driverCentral.io project portal
Driver Actions	
Debug Mode	Off

8. Type in the project token we took note of earlier

9. Click **Actions** tab

10. Click **Check Drivers**

Install Chowmain driver

1. Install the Chowmain driver

2. You will notice that the Activation Status reflects a Licence Activated state

3. Any driver that does not have a purchased licence will have a trial licence activated via the marketplace
   Note that there is no way to reactivate the trial so please use wisely

4. If you do not then press the Check Drivers action in the driverCentral Cloud driver again

Activation Status	Update Available!!! License Activated
Driver Version	1002
Driver Information	Navigate to connections tab and make serial binding
Automatic Updates	Off

Change Log

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- Initial release