



Easy access  
to extended  
device features

How to guide

**2.6**

# Manage dewarped video

AXIS Optimizer for Milestone XProtect®



Step-by-step:

# Manage dewarped video

Axis dewarping functionality makes it possible to use any Axis 360-degree panoramic camera in Milestone XProtect. As a 360-degree Axis camera covers a very large area, AXIS Optimizer makes it possible to dewarp the image to have a distortion-corrected live video for easier viewing of the scene. You also gain the possibility to dewarp the stored 360-degree stream in the case of an event and the need for a forensic investigation of the video material. Horizontal adjustment adds a horizon calibration that gives a nice view while allowing operators to zoom into the details like a virtual PTZ camera.

## Requirements

- Install your choice of:
  - Milestone XProtect Express+
  - Milestone XProtect Professional+
  - Milestone XProtect Expert
  - Milestone XProtect Corporate
  - Milestone XProtect Essential+
- Install the latest version of AXIS Optimizer on the Management Client
- Install AXIS Optimizer on Milestone XProtect® Smart Client 9.0c and later
- Axis devices with 360° or 180° panoramic views: AXIS M3007, AXIS M3047, AXIS M3048, AXIS M3057, AXIS M3058, AXIS M3067, AXIS M3068, AXIS M3077, AXIS P3807 (client-side stitching), AXIS P3818, and AXIS Q3819

## Create a dewarping view

1. To optimize the stream for dewarping, select the maximum available resolution for **Video stream 1** of **Camera 1** in Management Client
2. Open Smart Client and click **Setup**
3. Go to **Views**
4. Click **Create new view** and select a format
5. Go to **System Overview → AXIS Optimizer**
6. Click **Dewarping view** and drag it into the view
7. Select a camera and the camera's current mounting position
8. Click **Setup**
9. Go to the new dewarping view and click **Setting symbol**
10. Click **Set view type** and select one option. Depending on how the camera is mounted, you can select **Quad**, **Normal**, **Normal with overview**, or **Panorama**

Note: We recommend using 100% DPI. Axis dewarping on the second display may not be fully visible if the resolution is set to any other percentage.



## Create a dewarping view for multisensor panoramic cameras

You can use dewarping views for multisensor panoramic cameras, such as client-side stitching, horizontal adjustment, and PTZ control.

1. If applicable, set the capture mode to **Client Dewarp** during the initial device setup.
2. Open Smart Client and click **Setup**
3. Go to **Views**
4. Click **Create new view** and select a format
5. Go to **System Overview → AXIS Optimizer**
6. Click **Dewarping view** and drag it into the view
7. Select a multisensor panoramic camera.  
The first time you add the multisensor panoramic camera to a dewarping view, a horizon calibration window will be displayed above the view.
8. Click the arrows to make the red line align to the world horizon.
9. Click **Done** to save your settings and exit the calibration mode.

### Requirements

- XProtect Corporate, Expert, Professional+, Express+ or Essential+ running Smart Client 2017 R3 or later
- Users with one of the following user rights:
  - Optimizer role
  - Hardware > Driver commands = Allow
- An Axis multisensor panoramic camera

## Set a home position

1. In Smart Client, open a dewarping view.
2. Go to the position you want to save as home position.
3. Click , then Set **home position**

## Allow operators to control and edit dewarping views

Step 1: Turn on **Role settings**:

1. In Management Client, go to Site Navigation > Security > AXIS Optimizer Security.
2. Select Enable Role settings.
3. Restart Management Client.

Step 1: Configure **Role settings**:

1. In Management Client, go to Site Navigation > Security > Roles
2. Select a role and go to **Overall security**
3. Click **AXIS Optimizer Security**
4. Select dewarping features the role should have access to:
  - a. **Control dewarping view.** Operator roles can move around in the dewarping views.
  - b. **Edit a dewarping view's home position.** Operators can edit a camera's home position.

Support to get you started

Watch **AXIS Optimizer** how to videos

See **online user manual**

Download **more how to guides**

Read **AXIS Optimizer** getting started guide

Step-by-step workflows for specific jobs-to-be-done may change over time. Please refer to the [online user manual](#) for the latest descriptions

# Save time and gain direct access to all device features

There is no generic dewarping feature that works smoothly across all device types in Milestone XProtect or any other video management systems. This is why users often face problematic transitions from overview to dewarped views as well as rough viewing in pan/tilt/zoom views. At the same time, many Axis cameras have built-in camera-specific features that enable unique, full capabilities and value such as dewarping, WDR, EIS, IR, or privacy masking. Without AXIS Optimizer, operators must access each device individually to enable, adjust, and use these features. As most operators do not have the right to change device features and settings, they need support from admin roles.

## How AXIS Optimizer solves this problem

AXIS Optimizer video dewarping provides admin and operator roles a seamless means of integrating Axis dewarping in Milestone XProtect. Dewarping is done either directly in the camera or in the Smart Client with any Axis 360° panoramic camera. When operators use client-side dewarping, they get smooth dewarping both in live and recorded video. When returning to a view, you'll automatically go to the latest dewarping location. And dewarping is included when you export videos.

### About AXIS Optimizer for Milestone XProtect

AXIS Optimizer is a suite of integrations that optimizes the performance of Axis devices in Milestone XProtect. It ensures all users save considerable time and effort while getting the most out of their Axis and Milestone system. Continuously updated to cover new Axis offerings, it's available for free as a one-time installer on [axis.com](https://axis.com).



# About Axis Communications

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.