



Perform  
automated actions

How to guide

**4.6**

# Automatic vehicle access

AXIS Optimizer for Milestone XProtect®



Step-by-step:

# Centrally managing license plate lists

AXIS Optimizer makes it possible to create automated actions as responses to real-time events, such as granting vehicle access upon entry and exit. This 100% camera-based solution encompasses two related Smart Client workflows:

1. centrally managing license plate lists as credentials in allow- and block-lists
2. centralized search for and export of license plate entries in event logs

## Requirements

- Install Milestone XProtect 2019 R2 or later on:
  - 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
- AXIS License Plate Verifier 1.8 or later running on Axis cameras. If you want to create custom lists, AXIS License Plate Verifier 2.0 or later is needed

## Create a list

1. In Management Client, go to **Site Navigation** → **AXIS Optimizer** → **License plate lists**
2. Select the cameras that you want to send the allow-, block-, and custom lists to
3. (Optional) Add user roles that can view and edit the lists
4. Import or manually add license plates to the allow-, block-, or custom lists. When the list status shows **Synchronized**, it has been pushed to the cameras you selected

## Configure list permissions

Admin roles can configure operator or other roles to add vehicles to lists based on daily needs. And all permissions to view and edit lists can be chosen individually for each list

1. In Management client, go to **Security** → **Roles** and select a role
2. Go to the **AXIS Optimizer** tab
3. Under **Role Settings**, go to **AXIS Optimizer** → **License plate lists**. Select a list and select **Read** and **Edit license plates**. For older versions than XProtect 2023 R2, go to **MIP** → **AXIS Optimizer** → **AXIS Optimizer Security** → **License plate lists** and select **Edit license plate lists**

## Edit lists in Management Client

1. Go to **Site Navigation** → **AXIS Optimizer** > **License plate lists**
2. Select the site that you want to edit
3. Update **Cameras** or **License plates** as needed. When the list status shows **Synchronized**, it has been pushed to the cameras you selected

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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



Step-by-step:

# Search for and export of license plate entries

## Requirements

- Install Milestone XProtect 2018 R3 or later on:
  - Milestone XProtect Express+
  - Milestone XProtect Professional+
  - Milestone XProtect Expert
  - Milestone XProtect Corporate
  - Milestone XProtect Essential+
- Install Milestone Device Pack 10.1 or later
- Camera time must be synchronized with NTP
- AXIS License Plate Verifier 1.8 or later running on Axis cameras

## Configure vehicle search from license plate lists

1. In Management Client, add the camera that runs the chosen application
2. Enable all devices that you need. To be able to use AXIS License Plate Verifier, Camera 1 and Metadata 1 are required
3. Configure metadata:
  - a. Go to **Site Navigation** → **Recording Server** and find the device
  - b. Select Metadata 1 and click **Settings**
  - c. Go to **Metadata stream** → **Event** data and select **Yes**
4. Go to the **Record settings** tab and make sure that recording is enabled for metadata
5. Click **Save**

## Search for a license plate

1. To set up a separate tab In Smart Client, go to **Settings** → **Axis search options** and select **Show license plate tab**
2. Go to **Axis license plates**
3. Click **Add camera...** and select relevant cameras > Click **Close**. You must have an admin role to add cameras to the system
4. Enter a license plate and a **Time interval** to filter a maximum of 5,000 search results

## Fine-tune a search

Decrease the number of possible search results by using any of these built-in filters:

- **Time interval**- filters by searching specific time intervals
- **License plate**- filters by partial or complete license plate characters

- **Cameras**- filters by specific cameras, e.g. which enables location filtering
- **Direction**- filters by vehicles moving in a certain direction
- **Lists**- filters by certain sites as well as by allow, block, and custom lists

## Export search results

To save a PDF report with high-quality images

1. Click **Export...**
2. Select **PDF...**
3. (Optional) Enter **Report name**, **Report destination**, and **Notes**
4. For each search result, select which frame you want to include in the report. To enlarge an image, double-click it
5. Click **Create**. When the report is ready, you'll get a notification

To save as a CSV report

1. Click **Export...**
2. Select **CSV...**
3. Choose a destination for the file to export to

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# Automation improves response time and accuracy

Managing real-time events involves performing manual tasks, which heightens the risks of mistakes or delays occurring. To perform automated vehicle access traditionally in Milestone, only administrator roles can access license plate lists in the Management Client, which is a very inefficient use of personnel. What's more, that work is not connected to searching license plates – and must be done independently for each camera. All this takes a lot of time for admin roles to perform these workflows, which should ideally be performed by operator or similar roles.

## How AXIS Optimizer solves this problem

The AXIS Optimizer suite of integrations optimizes automated vehicle access into a combined workflow. What's more, this 100% camera-based solution allows both admin and operator roles to centrally manage license plate lists across all Axis cameras running AXIS License Plate Verifier analytic – as well as search for license plate entries and export results – on all sites. All of this boosts operational efficiencies while saving time, costs, and effort to perform this work.

### 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.