

Aimetis Outdoor Object Tracker
2.0
User Guide

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Introduction

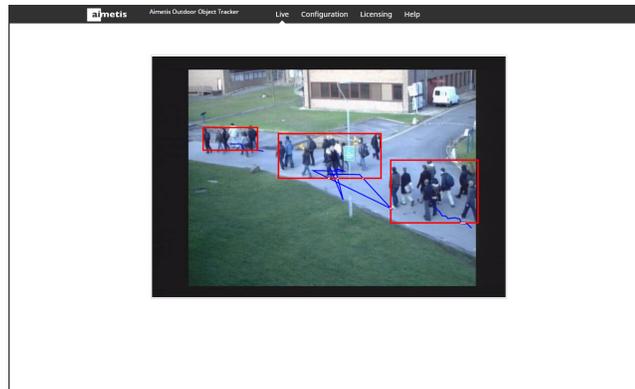
Aimetis Outdoor Object Tracker is an embedded video analytic that offers outdoor object tracking, classification, event triggering, and alarming for Axis network cameras and encoders.

You can define the areas in the scene to monitor and Outdoor Object Tracker triggers alarms based on motion in that area.

To use Outdoor Object Tracker alarms in Symphony, you must add the camera with the Outdoor Object Tracker embedded video analytic to Symphony and create an alarm in Symphony for the camera.

The live view for Outdoor Object Tracker includes the following elements:

- Blue boxes identify people and blue lines identify the trajectory of people.
- Yellow boxes identify vehicles and yellow lines identify the trajectory vehicles.
- Green boxes identify unknown objects and green lines identify the trajectory of unknown objects.
- Red boxes identify people, vehicles, or unknown objects that trigger alarms.



Installation

Install Outdoor Object Tracker on a camera using the camera Web interface.

You must install the version of Outdoor Object Tracker that matches the CPU of the camera (either Artpec-6 or Artpec-5 and earlier). For information on checking the CPU of a camera, see [KB10342](#).

Requirements

Component	Requirements
Image	Objects in images should be 16 x 16 pixels or larger for reliable tracking.
Cameras	One of: <ul style="list-style-type: none"> • ARTPEC-4 • ARTPEC-5 • ARTPEC-6
Camera firmware	Supports Embedded Development Version 2.0
License	Aimetis Outdoor Object Tracker (AIM-AX-OOT)

Install Outdoor Object Tracker

1. Download the Outdoor Object Tracker analytic package from <http://www.Aimetis.com/Xnet/>.
2. Log in to the camera home page.
3. Click **Settings**.
4. Click the **Apps** tab.
5. Click **Add**.
6. Click **Browse** and select the Outdoor Object Tracker analytic package.
7. Click **Install**.
8. On the **Apps** tab, click **Aimetis Outdoor Object Tracker**.
9. Click the **Start and stop the app** toggle switch.

Open Outdoor Object Tracker

1. Log in to the camera home page.
2. Click **Settings**.
3. Click the **Apps** tab.
4. Click **Aimetis Outdoor Object Tracker**.
5. Click **Open**.
6. If this is your first time logging in, click **Accept** to accept the license and warranty terms.

Add a license

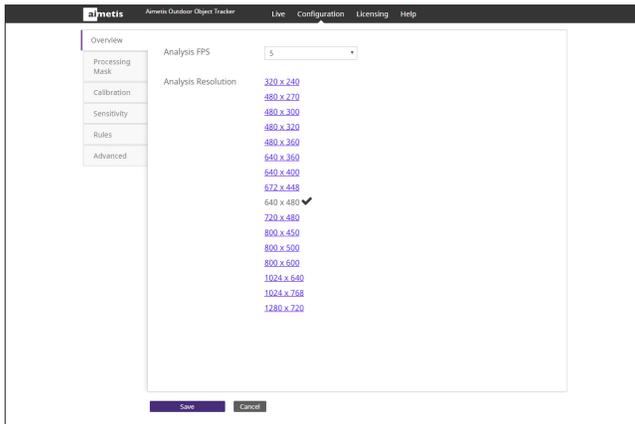
1. On the camera home page, click **Settings > Apps > Aimetis Outdoor Object Tracker**.
2. Click **Open**.
3. Click **Licensing**
4. Copy the camera MAC address.
5. Open <http://www.Aimetis.com/Xnet/> and click **Account Management**.
6. Under **Embedded Analytics**, click **Add**.
7. Type a name for the camera.
8. In the **MAC Address** field, copy the MAC address of the camera.
9. Select **I will add licenses to this camera**.
10. Click **Register Camera**.
11. Click **Embedded Analytics**.
12. Copy the license key.
13. In the administration interface for the embedded video analytic, click the **Change** button.
14. In the **License Key** field, paste the license key.
15. Press **Save**.

Configuration

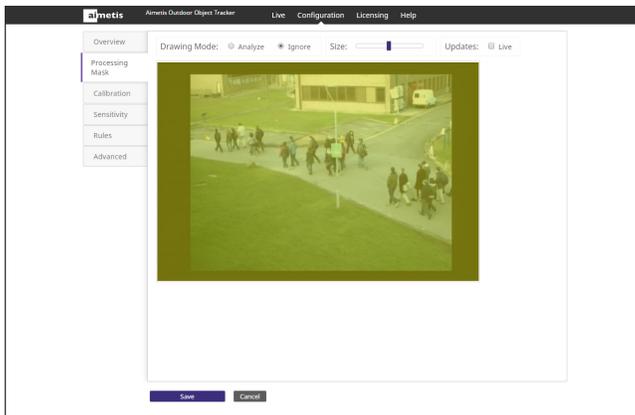
Configure Outdoor Object Tracker using the administration interface in a browser. When you install Outdoor Object Tracker on a camera, you can access the administration interface from the camera home page.

Configure Outdoor Object Tracker

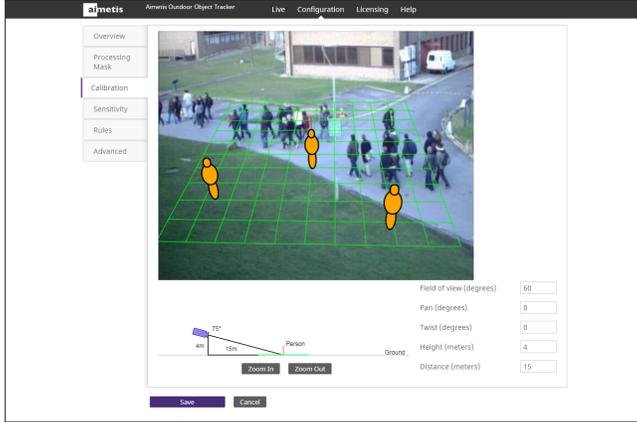
1. In the Outdoor Object Tracker administration interface, click **Configuration**.
2. On the **Overview** tab, configure general settings for the camera.



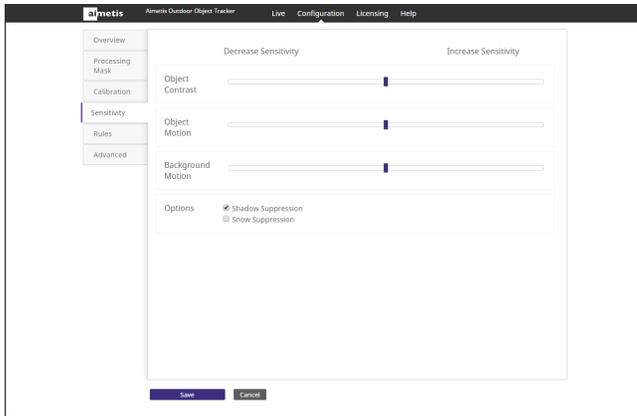
3. On the **Processing Mask** tab, set the areas in the image that the camera ignores or analyzes.



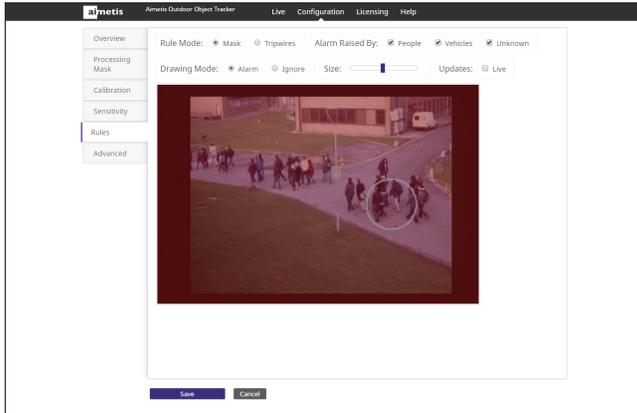
- On the **Calibration** tab, set the location and orientation of the camera.



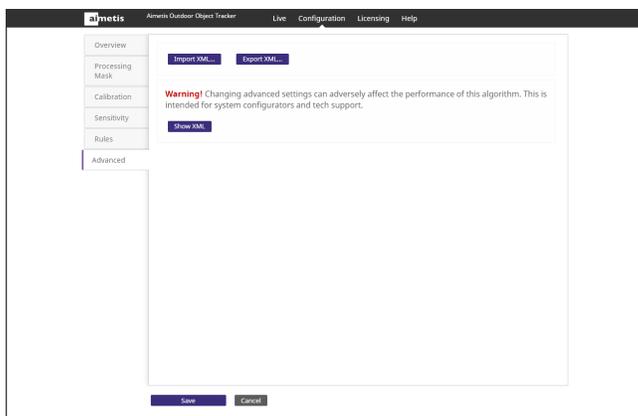
- On the **Sensitivity** tab, set the sensitivity of the camera to contrast and motion (both object and background), and set whether the camera ignores the motion of shadows and reflections off snow.



- On the **Rules** tab, set the criteria for alarms.



- On the **Advanced** tab, edit the XML file that contains the configuration settings.



- Click **Save**.

Settings

Overview

Setting	Description
Analysis FPS	Set the frames per second for the camera on which Outdoor Object Tracker is active. This value is fixed at 5 FPS.
Analysis Resolution	Set the resolution for the camera on which Outdoor Object Tracker is active.

Processing Mask

Setting	Description
Drawing Mode	Select whether the paintbrush marks areas in the processing mask image to include (Analyze) or exclude (Ignore).
Size	Select the size of the paintbrush that you use in the processing mask image.
Updates	Select whether the image in the processing mask is static or live.

Calibration

Setting	Description
Field of view	Define the horizontal field of view for the camera.
Pan	Type the angle (degrees) of horizontal rotation around the vertical axis of the camera.
Twist	Type the angle (degrees) of rotation around the long axis of the camera.
Height	Set the height (meters) on the camera. You can also adjust the height by dragging the camera in the layout diagram.
Distance	Set the distance (meters) between the camera and the front of the monitored area. You can also adjust the distance by dragging the camera in the layout diagram.

Sensitivity

Setting	Description
Object Contrast	Set how sensitive the camera is when assessing the contrast between objects and the background. Decreasing the sensitivity decreases the number of tracked objects and increasing the sensitivity increases the number of tracked objects.
Object Motion	Set how sensitive the camera is when assessing motion in the monitored area. Decreasing the sensitivity decreases the number of tracked objects and increasing the sensitivity increases the number of tracked objects.
Background Motion	Set how sensitive the camera is to slow-moving objects (for example, moving clouds or lighting changes). Increasing the sensitivity causes the tracking of slow-moving objects and might increase the number of false alarms.
Shadow Suppression	Select whether to ignore (suppress) the motion of shadows.
Snow Suppression	Select whether to ignore (suppress) the motion of falling snow.

Rules

Setting	Description
Rule Mode	Select whether to draw a mask or a tripwire.
Alarm Raised By	Select whether people, vehicles, or unknown objects can trigger alarms.
Drawing Mode	For masks, select whether to monitor or ignore the area defined by the mask.
Size	For masks, select the size of the paintbrush for drawing the mask.
Updates	Select whether the image in the is a live image from the camera or a static image.

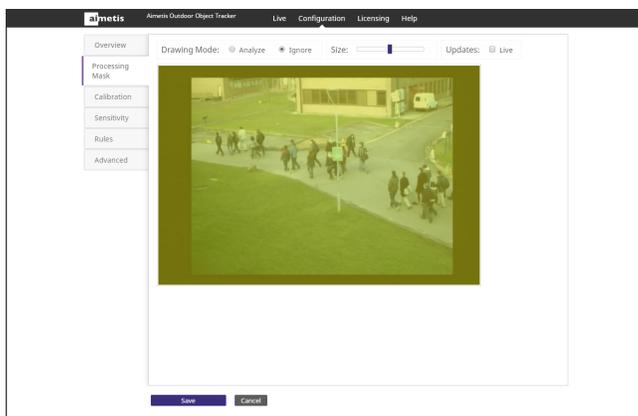
Advanced

Setting	Description
Import XML	Import the configuration XML from a file.
Export XML	Export the configuration XML to a file.
Show XML	Show the configuration XML.

Draw a processing mask

1. In the Outdoor Object Tracker administration interface, click **Configuration**.

2. Click **Processing Mask**.



3. Perform one of the following tasks:

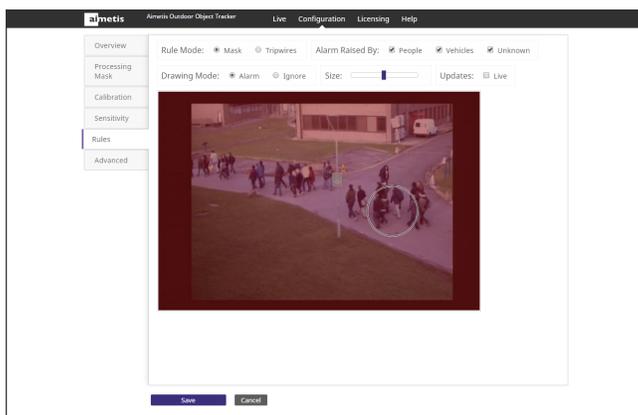
- a) To define an area that the camera analyzes, select **Analyze**.
- b) To define an area that the camera does not analyze, select **Ignore**.

By default, the entire camera view is set to analyze.

4. Use the **Size** slider to set the size of the paint brush.
5. To use a live image to define the processing mask, select **Live**.
6. Use the mouse to draw the area on the camera view.
7. Click **Save**.

Create an alarm

1. In the Outdoor Object Tracker administration interface, click **Configuration**.
2. Click **Rules**.

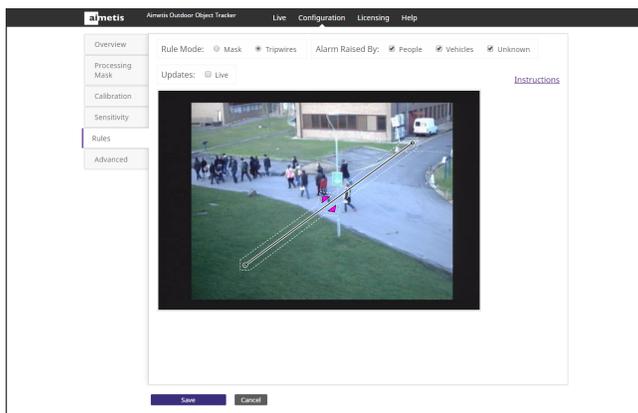


3. In the **Rule Mode** list, select whether a mask or tripwires trigger the alarm.
4. In the **Alarm Raised By** list, select the items that can trigger an alarm.
5. Perform one of the following tasks:
 - a) To use a mask, draw a mask to define the area in which motion triggers an alarm.
 - b) To use tripwires, add a tripwire across which motion triggers an alarm.
6. Click **Save**.

Add a tripwire

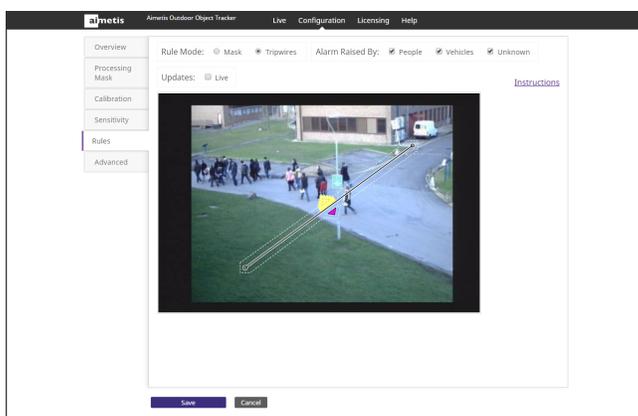
1. In the Outdoor Object Tracker administration interface, click **Configuration**.

2. Click **Rules**.
3. Select **Tripwires**.
4. In the image, click and hold the left mouse button, move the mouse across the image, and release the left mouse button.



To add a tripwire to the end of another tripwire, hold down the left mouse button where the tripwire ends (it will show a yellow square), move the mouse across the image, and release the left mouse button.

5. To set the direction of motion that the tripwire detects, click the arrows on the tripwire.



The tripwire detects motion across the tripwire line in the same direction as the visible arrows on the tripwire.

6. Click **Save**.

Remove a tripwire

1. In the Outdoor Object Tracker administration interface, click **Configuration**.
2. Click **Rules**.
3. Select **Tripwires**.
4. Click a tripwire.
5. Press Delete.
6. Click **Save**.

Start or stop an embedded video analytic

1. Log in to the camera home page.
2. Click **Settings**.

3. Click the **Apps** tab.
4. Click the embedded video analytic.
5. Click the **Start and stop the app** toggle switch.

Reset Outdoor Object Tracker

1. In the Outdoor Object Tracker administration interface, click **Help**.
2. Click **Reset to Factory Defaults**.

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