USER'S GUIDE

AXIS Video Motion Detection 2.1

Notices

This manual is intended for administrators and users of AXIS Video Motion Detection 2.1. It includes instructions for using and managing the product on your network. Previous experience of networking will be of use when using this product. Some knowledge of UNIX or Linux-based systems may also be beneficial, for developing shell scripts and applications. Later versions of this document will be posted to the Axis Website, as required. See also the product's online help, available via the web-based interface.

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Support

Should you require any technical assistance, please contact your Axis reseller. If your questions cannot be answered immediately, your reseller will forward your queries through the appropriate channels to ensure a rapid response. If you are connected to the Internet, you can:

- download user documentation and firmware updates
- find answers to resolved problems in the FAQ database. Search by product, category, or phrases
- report problems to Axis support by logging in to your private support area
- visit Axis Support at www.axis.com/techsup

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AXIS Video Motion Detection

AXIS Video Motion Detection is an application that detects moving objects within an area of interest. When objects are detected, the Axis product may generate an action or send a notification. Click Events in the product's menu for more information.

Recommendations and limitations

Video Motion Detection should not be used in critical scenarios that may have life or death situations, nor should it be used to alert law enforcement. The main focus of this application is to control when to start recording and when not to with respect to Area of Interest.

Video Motion Detection should only be installed in Axis products that are not subject to excessive vibrations. Some conditions might affect the reliability of detection such as weather conditions (snow or rain), reflections, shadows condition, if the object is too small or too large and if the object's movement is very slow or too fast.

In order to configure AXIS Video Motion Detection, you need to have Windows ®, Internet Explorer ® and Axis Media Control (provided by the camera).

Video Motion Detection can only be installed in Axis products with firmware version 5.40 or later and into the platform used by Axis products.

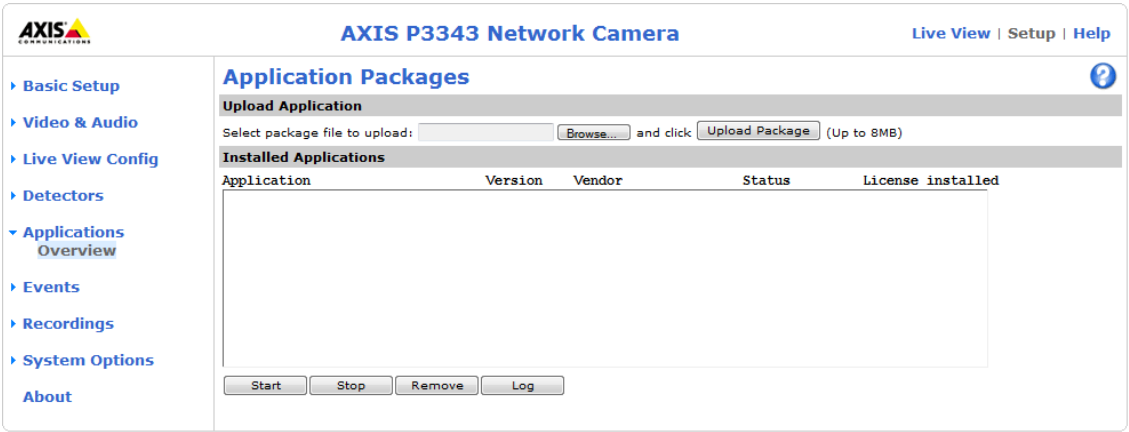
It is not recommended to run Video Motion Detection 2.1 at the same time as the camera's included application Motion Detection or another Application Package installed in the camera because it increases load on the processor which might affect performance.

Installation

Follow these instructions to install:

1. Download AXIS Video Motion Detection application from www.axis.com/applications
2. Go to **Setup** > **Applications** > **Overview**
3. Under **Upload Application,** click **Browse...** , locate the package file and then click **Upload Package**.
   Video Motion Detection will show under Installed Applications and in the menu under Packages it will show Motion Detection.
4. Select the Application in the list and click "Start"

Note: Only product administrators can upload new applications.

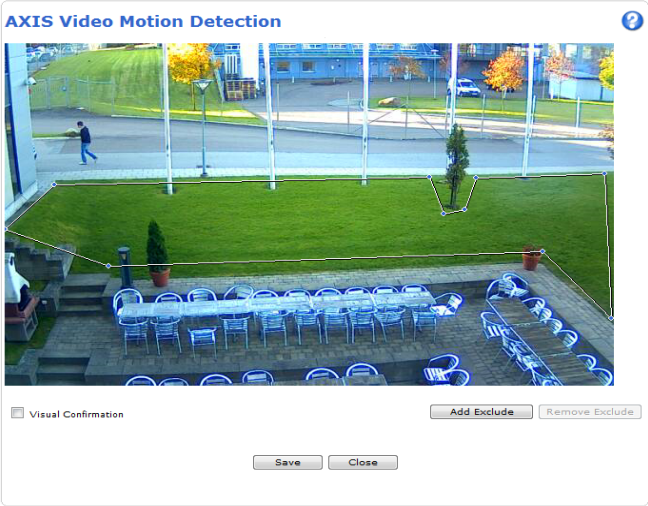


Set up AXIS Video Motion Detection

The AXIS Video Motion Detection application can only be configured when in **running** or **idle** status.

Go to **Applications** > **Overview**. Click on **Video Motion Detection** under Installed Applications and click on **Start**.

To configure the application go to **Applications** > **Motion Detection** > **Settings**. Click on **AXIS Video Motion Detection settings** link.



Area of Interest

The Area of Interest is a virtual area that is defined in AXIS Video Motion Detection to detect moving objects entering a defined area and may trigger a camera to generate an action or send a notification. It is defined by a polygon of 3-20 points. The default area of interest is a square placed in the center of the image. The area of interest can be moved by placing the pointer over a line. When the pointer becomes a cross, left-click and drag to desired area.

To add points, right-click in the line and to remove a point, right-click on the point you want to remove.

Note: An area of interest can only be modified when using Internet Explorer and Axis Media Control (AMC).

Exclude Area

The Exclude Area is a virtual area that is defined in AXIS Video Motion Detection whenever it is required to mask a part of an area of interest to avoid unwanted triggering of camera action. It is defined when swaying objects such trees or flags are inside the area of interest.

To add an exclude area click **Add Exclude**. The exclude area is defined by a polygon of 3-20 points. The exclude area can be modified in the same way as Area of Interest.

Visual Confirmation

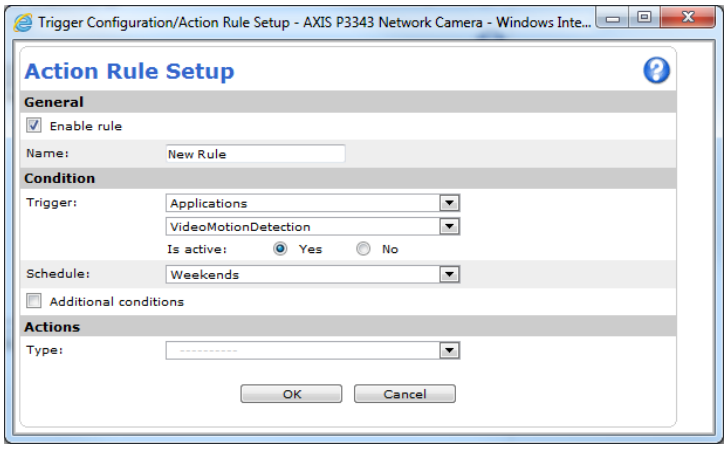
This setting is used to validate if the settings are correct, that is objects are correctly detected. When this option is enabled, the area of interest polygon will turn red when objects enter the area. The lines stay red as long as moving objects are detected within the area of interest.

Note: Enabling Visual confirmation may introduce video latency.

Set up Event Configuration

To configure an alarm or event if the line has been touched, go to **Events** > **Action Rules**. Click **Add....** to open the Action Rule **Setup** dialog.

1. Under **General** give the event a descriptive name. (see online help files).
2. From the **Trigger** drop-down list select **Applications** and then **VideoMotionDetection** from the drop-down list that appears.



Note: AXIS Video Motion Detection must either have a status of Idle or Running for the VideoMotionDetection option to appear in the drop-down list.

3. Select "Is active – Yes" to trigger on motion, select "Is Active – No" to trigger on no-motion in area.
4. Set the **Schedule** when the event is to be active, for example on weekends, only after office hours, etc.
5. Set the **Actions Type** parameters, that is, set what the event should trigger when the line is touched, for example record video, send notification etc.
6. Click **OK** to save the event in the Action Rule List.

For more information about configuring events, refer to the Axis product's User's Manual or the online help for descriptions of each available option.

Considerations when using Video Motion Detection

In order to achieve good detection rate and reduce false detections, consider the following:

- Install in Axis products that are not subject to excessive vibrations.
- The lighting condition (lux) should be within the Axis product's specifications. Add additional lighting if needed.
- Fast moving objects may not be detected. Video Motion Detection may need up to 300-400 ms in order to detect a new object entering the scene. Adjust the camera's view in order to maximize the time objects are within the cameras view.
- Too large or too small objects may not be detected.
- Very slow moving objects may not be detected.
- Video Motion Detection 2.1 may trigger when installed in PTZ cameras and the PTZ is moving. These triggers may be restrained by enabling "Image freeze on PTZ" located in the camera interface under **Setup** > **Video** > **Camera settings**
- Heavy rain or snow may reduce detection rate.
- Use exclude area when swaying objects such trees or flags are inside the area of interest
- Various light phenomena such as sweeping car headlights, shadows or reflections may behave as moving objects and can give a false detection. You may need to adjust the area of interest, camera placement or camera view

System Integration

AXIS Video Motion Detection is conformant with Open API for software integration, including the ONVIF specification available at www.onvif.org, as well as VAPIX® and AXIS Camera Application Platform from Axis Communications, specifications available at www.axis.com

Technical Specifications

Function/group	Item	Specification
Compatible products	**Models**	For a complete list of products that support the application, go to AXIS Video Motion Detection product page at www.axis.com
Setup & configuration		Windows ® and Internet Explorer ®
Application settings	**Virtual area setup**	Area of Interest setup with one Exclude Areas
	Verification	Support for visual confirmation
Scenarios	**Typical cases**	General low-traffic areas such as building entrances, loading docks, parking lots
	Limitations	Weather conditions such as heavy rain or snow may affect detection accuracy
Camera considerations	**Lighting conditions**	Dependent on camera light sensitivity
Integration	**Axis product**	Integrates with the Axis product's event management system. image upload, notification, I/O control
	Software	Open API for software integration, including the ONVIF specification available at www.onvif.org, as well as VAPIX® and AXIS Camera Application Platform from Axis Communications, specifications available at www.axis.com Please confirm if your preffered Video Management Software supports integration of AXIS Video Motion Detection.
General	**Language**	English