

1 Requirements

The purpose of this integration guide is to explain how to install and set up an Axis-compatible application that can be integrated with an exacqVision VMS system. This guide focuses on serial data integration with respect to the Axis Cross Line Detection application or the Axis Video Motion Detection application. The Axis Cross Line Detection application is used as the primary example in this document.

Software Version Requirements

- exacqVision server version: 5.6 or later
- Axis Cross Line Detection version 1.1.2 or Axis Video Motion Detection 2.1
- Axis camera firmware version 5.40.x or later
- Internet Explorer for configuring the Axis camera applications

2 Configuration

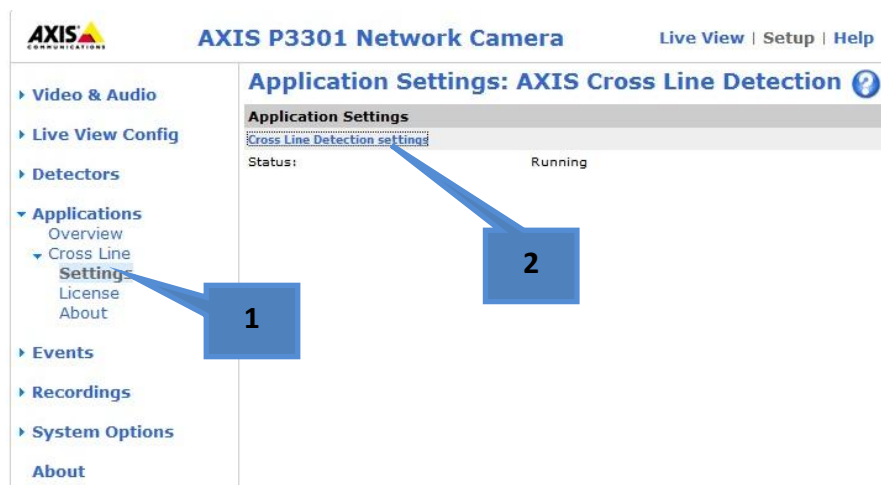
Configure Cross Line Application or Video Motion Detection on Camera

This section assumes that the Cross Line Detection application has been installed on a supported Axis camera. Axis installation instructions for both **Cross Line Detection** and **Video Motion Detection** can be found on the Axis web site:

http://www.axis.com/techsup/compatible_applications/crossline/
http://www.axis.com/techsup/compatible_applications/video_motion_detection/

After installation, complete these steps:

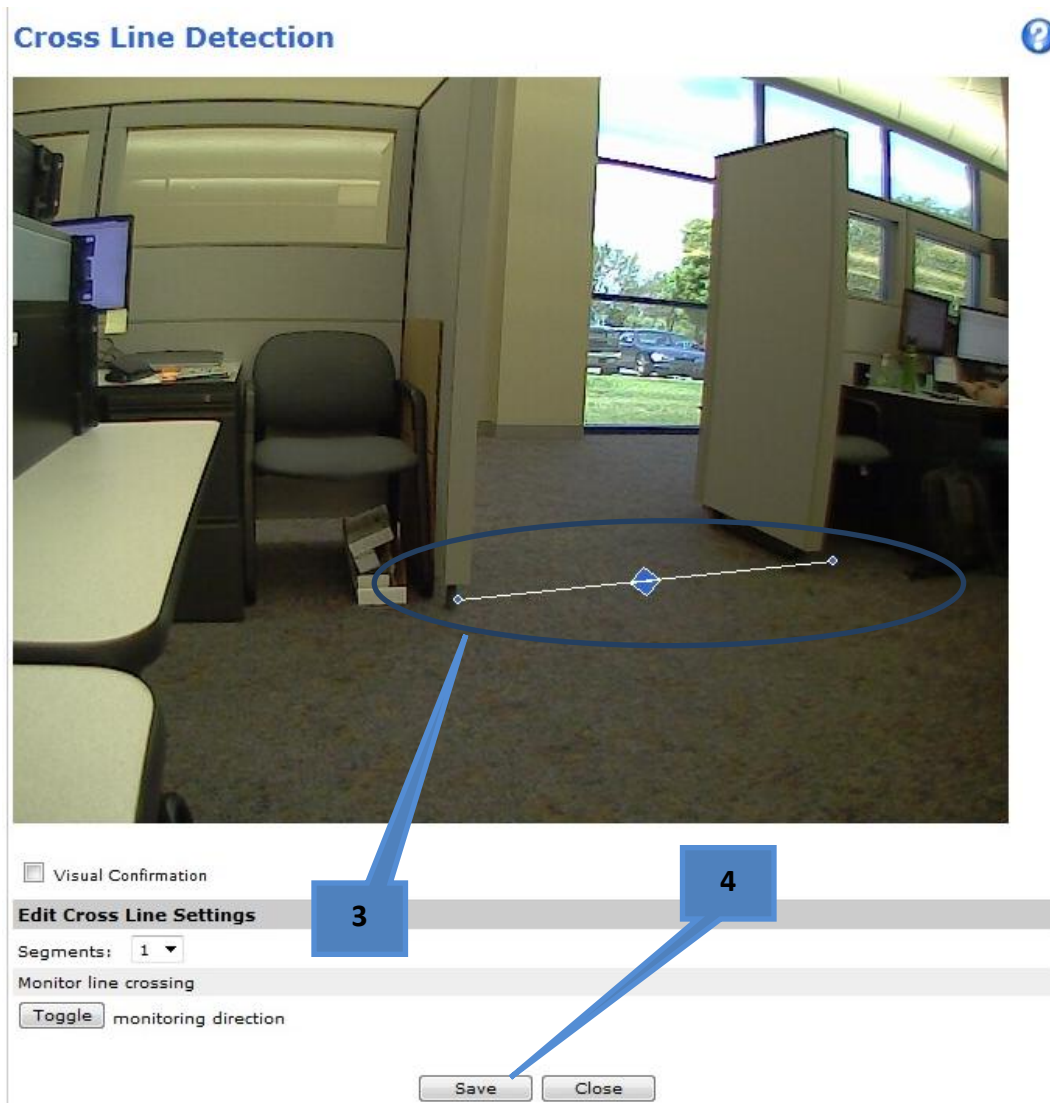
1. Open a browser to the camera. Under Applications, select Cross Line and then Settings.
2. Select Cross Line Detection Settings to open a new browser tab with a configurable live camera view.



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3. Configure the cross line as desired (or a box area for Video Motion Detection).
4. Click Save.

Cross Line Detection ?



Visual Confirmation

Edit Cross Line Settings

Segments: 1 ▼

Monitor line crossing

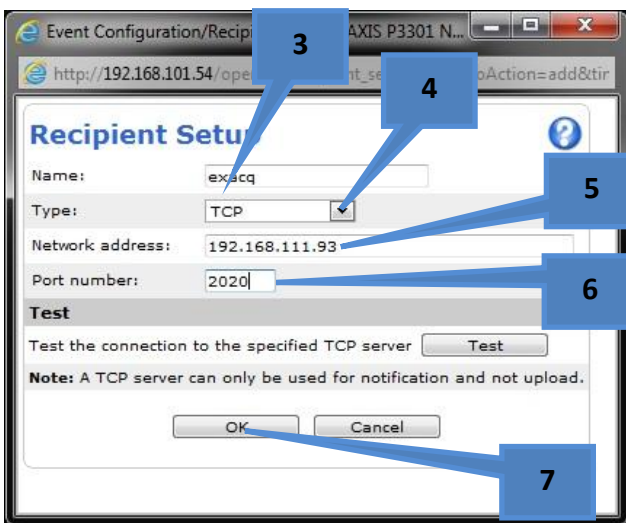
monitoring direction

Configure exacqVision as a Recipient of Data

1. In the camera's browser, select Recipients under Events.
2. Click Add.

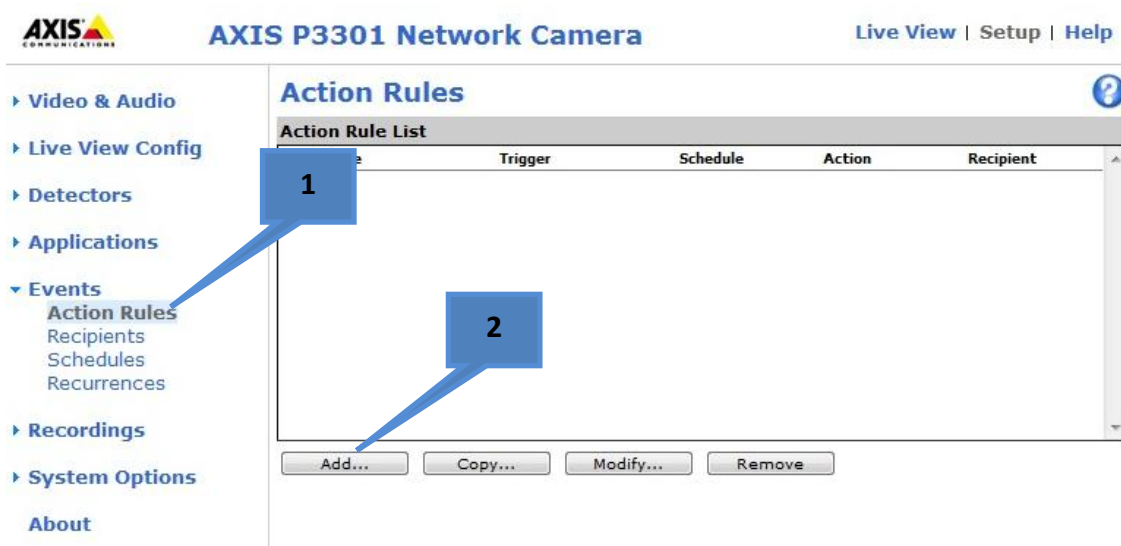


3. On the pop-up screen, enter a profile a name.
4. Select TCP from the Type drop-down list.
5. Enter the IP address of the exacqVision server.
6. Enter the port number of the exacqVision server. (This number can be any value not already used on the exacqVision server.)
7. Click OK.

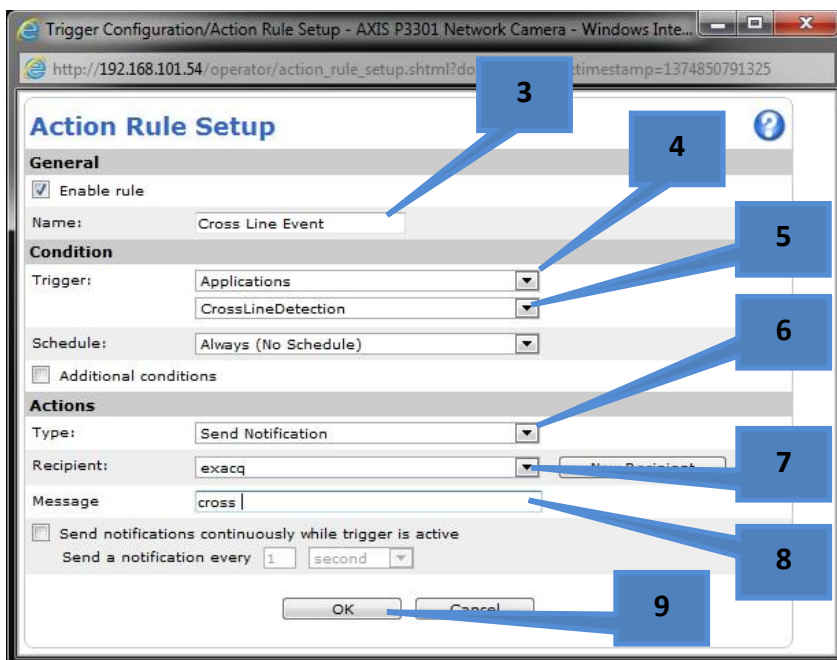


Configure an Action Rule in Camera

1. In the camera's browser, select Action Rules under Events.
2. Click Add.



3. On the pop-up screen, create name for event.
4. Select Applications from the Trigger drop-down list.
5. Select **CrossLineDetection** or **Video Motion Detection** from the drop-down list.
6. Select **Send Notification** from the Type drop-down list.
7. Select **exacq** from the Recipient drop-down list.
8. Create a message of your choice such as "cross " or "motion " (NOTE: Enter exactly one space after this key word)
9. Click OK.



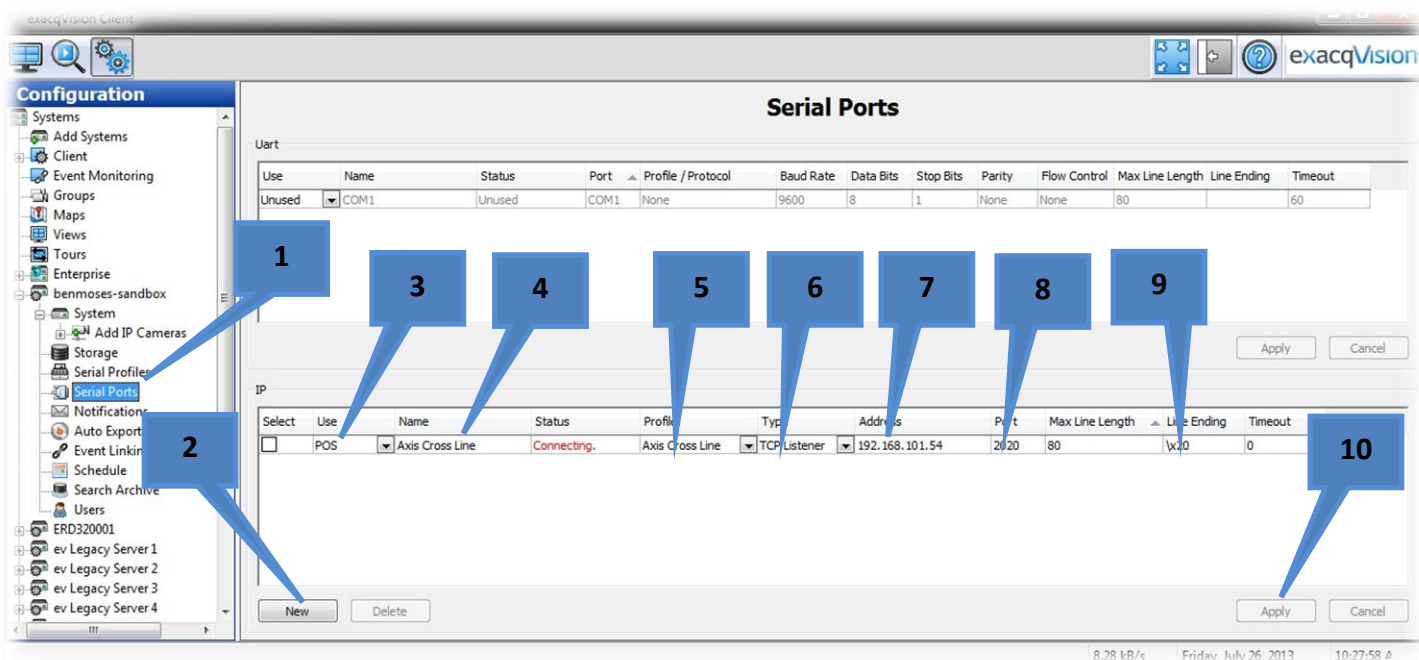
Configure the Serial Profile on exacqVision Server

1. Open exacqVision Client and click on the Config (Setup) button.
2. Select Serial Profiles from the tree under the exacqVision server.
3. Click New.
4. Enter an appropriate name such as **“Axis Cross Line”** or **“Video Motion Detection”**.
5. Click Apply to add it to the list.
6. Select the new profile in the list.
7. Click New on the Event Keywords tab.
8. Enter **“cross”** or **“motion”** into the String field (this is the ASCII string to be searched for; no extra space is required).
9. Click Apply.

The screenshot displays the exacqVision Configuration window. On the left, a tree view shows the system hierarchy, with 'Serial Profiles' selected under the 'benmoses-sandbox' system. The main area shows the 'Serial Profiles' configuration for the selected profile, 'Axis Cross Line'. The 'Name' field contains 'Axis Cross Line'. The 'SOT marker' and 'EOT marker' fields are empty. The 'Case Sensitive' checkbox is checked. The 'Event Keywords' tab is active, showing a table with one entry: 'cross' with the 'Enable' checkbox checked. The 'Apply' button is highlighted, indicating the configuration is being saved.

Configure the Serial Port on exacqVision Server

1. In exacqVision Client, select Serial Ports from the tree under the exacqVision server.
2. Click New.
3. Select POS from the Use drop-down list.
4. Enter a name for your reference, such as **“Axis Cross Line”** or **“Video Motion Detection”**.
5. Select the profile created in the previous section (in this case, **“Axis Cross Line”**).
6. Select TCP Listener from the Type drop-down list.
7. Enter the IP address of the camera.
8. Enter port 2020.
9. Enter **“\x20”** as the line ending. This represents the space found at the end of the character string **“cross ”** or **“motion ”** from the action rule step.
10. Click Apply.



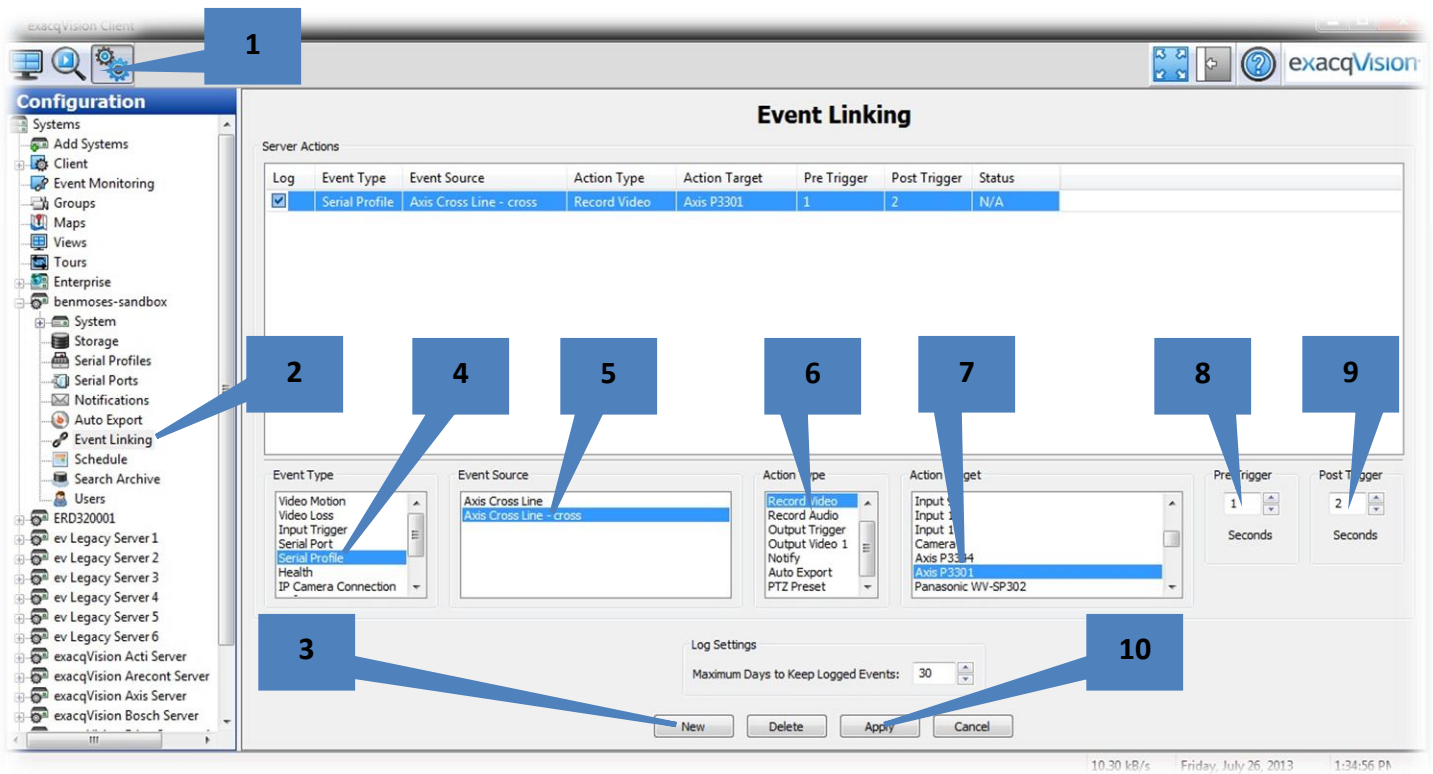
The exacqVision system is now ready to receive data from the camera.

Note: The Status will remain **“Connecting”** because the camera establishes a TCP connection only briefly when it has data to send. This transaction is accomplished in a few milliseconds; therefore, the status will remain in a **“Connecting”** state most of the time. This is not a problem.

Event Linking on Keyword Serial Data

Now that serial data connection has been established with the exacqVision server, an event can be linked using the keyword-matching function of the serial data interface.

1. In exacqVision Client, select the Config (Setup) icon.
2. Select Event Linking from the tree under the exacqVision server.
3. Click New.
4. Select Serial Profile from the Event Type list.
5. Select **Axis Cross Line** or **Video Motion Detection** from the Event Source list.
6. Select Record Video from the Action Type list.
7. Select Axis P3301 from the Action Target list.
8. Set Pre Trigger to 1 (second).
9. Set Post Trigger to 2 (seconds), for a total of 3 seconds of recording.
10. Click Apply.



Three seconds of video should now be recorded per each cross line event.

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Verifying Line Cross Event Recordings

Verify the line cross integration or video motion detection is working by triggering an event and finding the three seconds of recorded video.

1. In exacqVision Client, select the Search icon.
2. Select the Axis camera running the **Cross Line Detection** or **Video Motion Detection** application.
3. Enter a valid date and time range when activity has taken place across the line.
4. Click Search.
5. The captured event of the line crossing is shown in red.

The screenshot displays the exacqVision Client interface. On the left, a 'Search Cameras' tree view shows a list of cameras, with 'Axis P3301' selected. Below this is a 'Search Serial' panel with fields for 'Start Time' (01:37 PM) and 'End Time' (01:52 PM) on 7/26/2013, and a 'Search' button. The main window shows a video feed of a woman in a red shirt walking through an office. A timeline at the bottom shows a red vertical bar indicating an event at 01:48:30. The interface includes a search icon (1), a camera selection list (2), search time range inputs (3), a search button (4), and a video player with a timeline showing the event (5).