HOW TO.

Configure Occupancy Events and Mobile Notifications in AXIS Camera Station

Contents

Introduction

Knowing how many people are present on your premises or in a certain area at a certain time lets you analyze occupancy data and make informed adjustments. You can use the information to analyze the flow of people within an area, improve the use of space, effectively allocate resources, and take measures if occupancy levels exceed your set threshold.

You can set occupancy thresholds that trigger actions such as automated voice messages through a loudspeaker or send alerts to supervisors. The following guide describes how to configure sending mobile notifications in AXIS Camera Station triggered by the AXIS P8815-2 3D People Counter or AXIS Occupancy Estimator when a user-defined occupancy threshold has been exceeded.

> **NOTE**
>
> The AXIS Occupancy Estimator is an application (ACAP) that is compatible with a large variety of standard Axis network cameras and requires a separate license.
>
> The AXIS P8815-2 3D People Counter already includes functionality to measure occupancy without any additional licensing.

This following configuration has been tested with the following products and firmware:

> **Prerequisites**
>
> AXIS Occupancy Estimator OR
>
> AXIS P8815-2 3D People Counter, firmware 10.3 or higher
>
> AXIS Camera Station 5.36 or higher
>
> AXIS Camera Station Mobile app

Please note that Axis doesn't take any responsibility for how this configuration may affect your system. If the modification fails or if you get other unexpected results, you may have to restore the settings to default.

Occupancy Events

The occupancy events functionality in AXIS P8815-2 3D People Counter and AXIS Occupancy Estimator produces stateful events which are triggered when user-defined lower and higher occupancy thresholds have been reached.

In total, three different stateful events can be produced using a low, medium and high trigger.
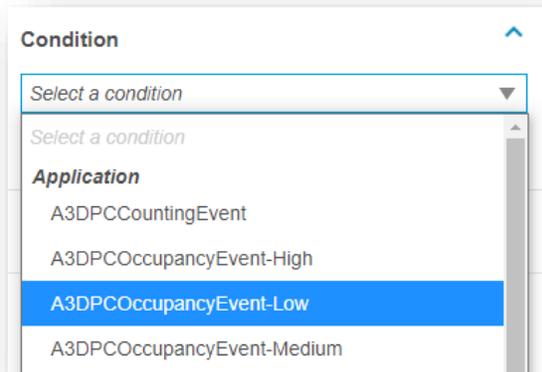
An example based on a specific use-case is necessary in order to better explain this functionality.

A manager at a retail store would like to be notified through the AXIS Camera Station mobile application when the occupancy level has exceeded the recommended limit. The manager would also like to be notified when the occupancy level is getting close to reaching the recommended limit.

Using this example, let's pretend that the maximum occupancy limit is 50 people and an acceptable occupancy level that is far below the maximum occupancy limit is 35. In this case, the lower and higher occupancy thresholds would be configured as follows from within the AXIS P8815-2 3D People Counter and AXIS Occupancy Estimator application interface.

Step 1 – Set the occupancy level thresholds within the application

Within the AXIS P8815-2 3D People Counter or the AXIS Occupancy Estimator application, access the Occupancy settings and enable events. Proceed to set a value for the higher and lower thresholds.
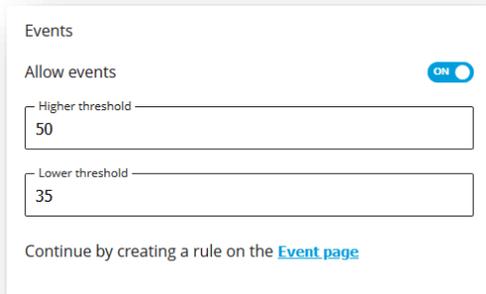
Step 2 – Configure device event triggers

Within AXIS Camera Station, two action rules will need to be configured – one for when the occupancy level is close to reaching the recommended occupancy limit, and another for when the occupancy has exceeded the recommended limit.

- Go to Configuration > Recording & Events and select Action rules.
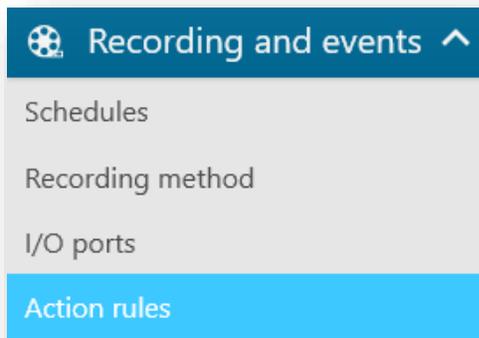
- Select "New" and click "Add" to create a new rule.
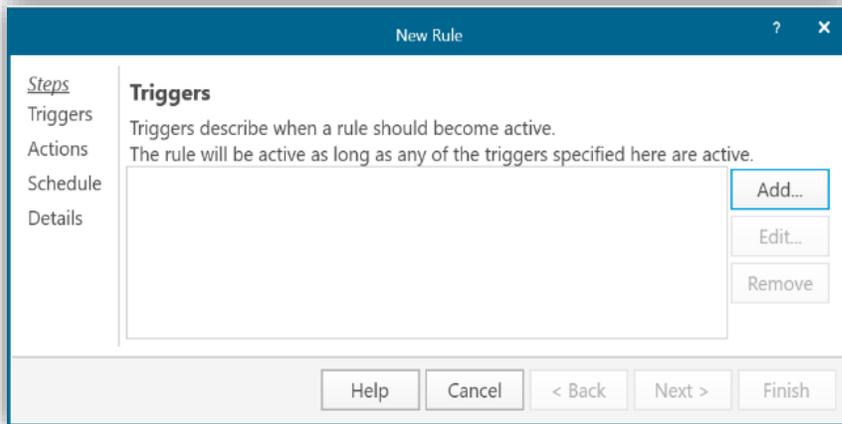
- Select "Device Event" and click OK.
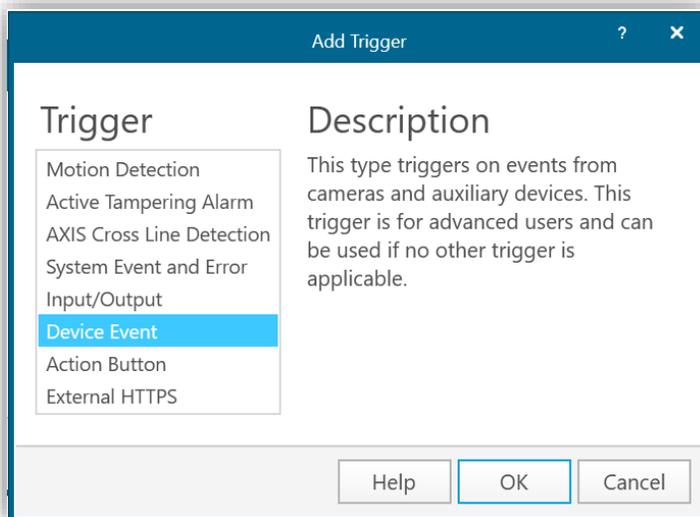
- Create device event for **medium** occupancy event threshold:

  - Device: Select the AXIS P8815-2 or Axis network camera running AXIS Occupancy Estimator.
  - Event: A3DPCOccupancyEvent-Medium or Occupancy-Medium (if using AXIS Occupancy Estimator)
  - Trigger period: 0 - 60
  - perimeter: in
  - active: yes

NOTE	In the Trigger period field, set an interval time between two successive triggers to reduce the number of successive events. If an additional trigger occurs within this interval, the event will continue, and the trigger period starts over from that point in time. This could be useful in this example to reduce the number of mobile notifications.

Step 3 – Configure the actions

In the Actions section, select the "Send mobile app notification" and enter a notification message and select whether the app should navigate to a specific camera when the notification is pressed on the mobile device.

If no camera is selected the notification will get a "Default" association which will bring up the main page of the AXIS Camera Station Mobile app when the notification is pressed.
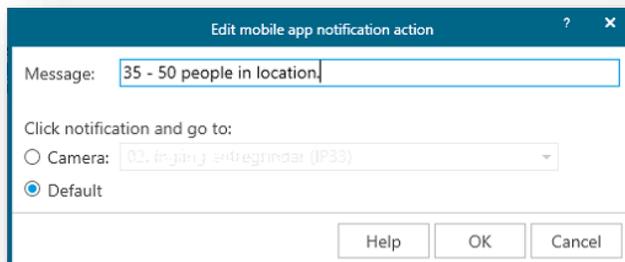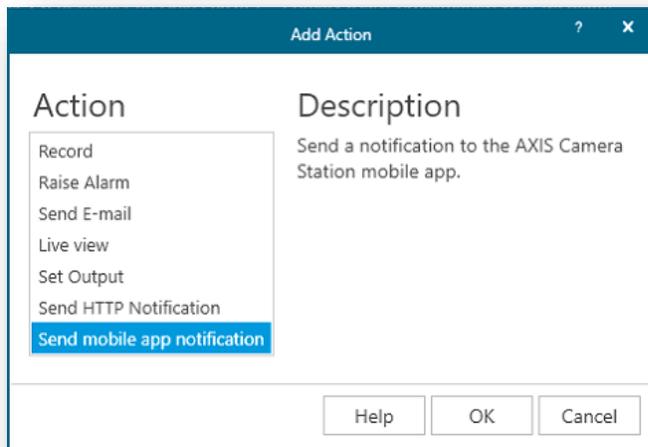
If needed, you can specify the hours when the alarm should be activated. You can choose to have the alarm activated permanently or customise the schedule according to your needs.

Proceed to provide the action rule with a descriptive name and click on "Finish" to finalize the configuration.
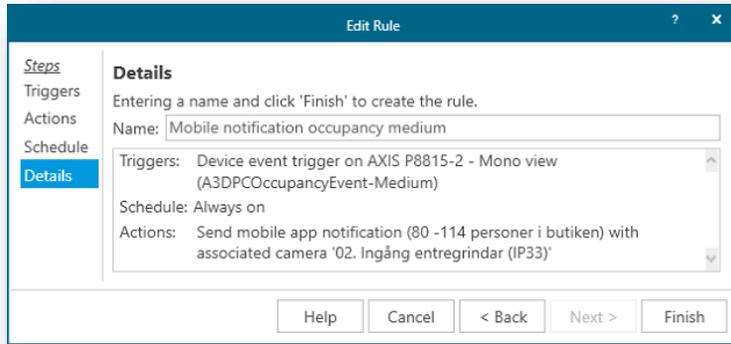
Repeat the above steps to configure a second action rule using the A3DPCOccupancyEvent-High or OccupancyEvent-High (if using AXIS Occupancy Estimator) condition that will be triggered when the occupancy level has been exceed, which in this context equals to 50 people.

> **NOTE**   It is also possible to associate more than one action per event. This allows for multiple actions to be triggered when the event is active such as sending a notification to the AXIS Camera Station Mobile application and raising an alarm within the AXIS Camera Station Client to prompt the operator to take further action when the occupancy level has exceeded the recommended limit.

Optionally, a third action rule could be configured when the occupancy level drops below the medium level, which in this context is 35 people. In this case, the "OccupancyEvent-Low" event would be used to trigger the action rule.

Considerations

If the action rules are configured according to this guide, the medium event will also be triggered when the occupancy level drops below 50 people, since the state of the medium event will turn to active at that point.

Additional Resources:

AXIS P8815-2 3D People Counter Manual

https://www.axis.com/sv-se/products/online-manual/50535

AXIS Occupancy Estimator Manual

https://www.axis.com/sv-se/products/online-manual/37915

Video Tutorial

https://youtu.be/fJ1d_5LTG4w