

Control video recording by MediaRecorder with EthoVision XT when you track live

Aim

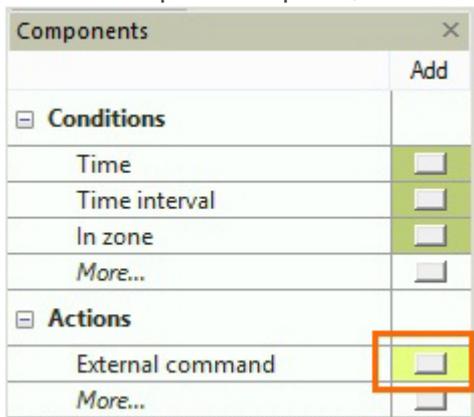
To start video recording automatically when something of interest is detected by EthoVision XT. This is, for example, useful if you have animals that spend a lot of time in a shelter. Start video recording when the animal leaves the shelter.

Prerequisites

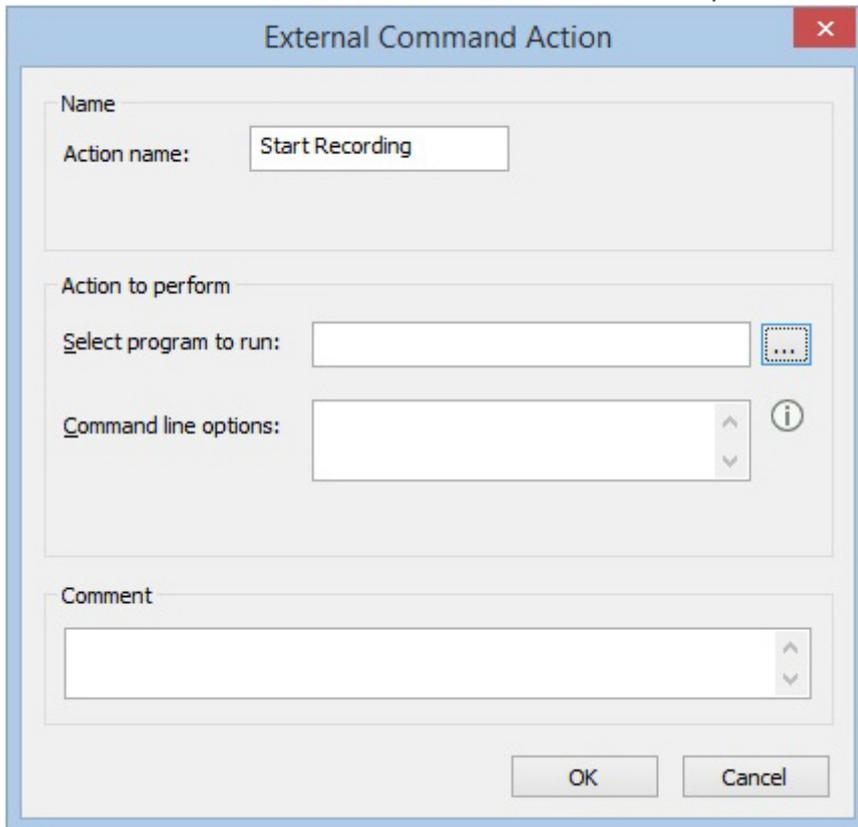
- You have cameras that are supported for tracking in EthoVision XT.
- MediaRecorder and EthoVision XT run on the same computer.

Procedure

1. In EthoVision XT, open the Trial Control screen by clicking the **Trial Control Settings** in the Experiment Explorer.
2. In the Components pane, under **Actions** click the button next to **External command**.



3. Enter a name in the **Action Name** field, for example, *Start Recording*.



The screenshot shows a dialog box titled "External Command Action". It has three main sections: "Name", "Action to perform", and "Comment". In the "Name" section, the "Action name:" field contains the text "Start Recording". The "Action to perform" section contains two fields: "Select program to run:" with an empty text box and a blue ellipsis button to its right; and "Command line options:" with an empty text box, up and down arrow buttons to its right, and an information icon to its right. The "Comment" section has an empty text box with up and down arrow buttons to its right. At the bottom of the dialog are "OK" and "Cancel" buttons.

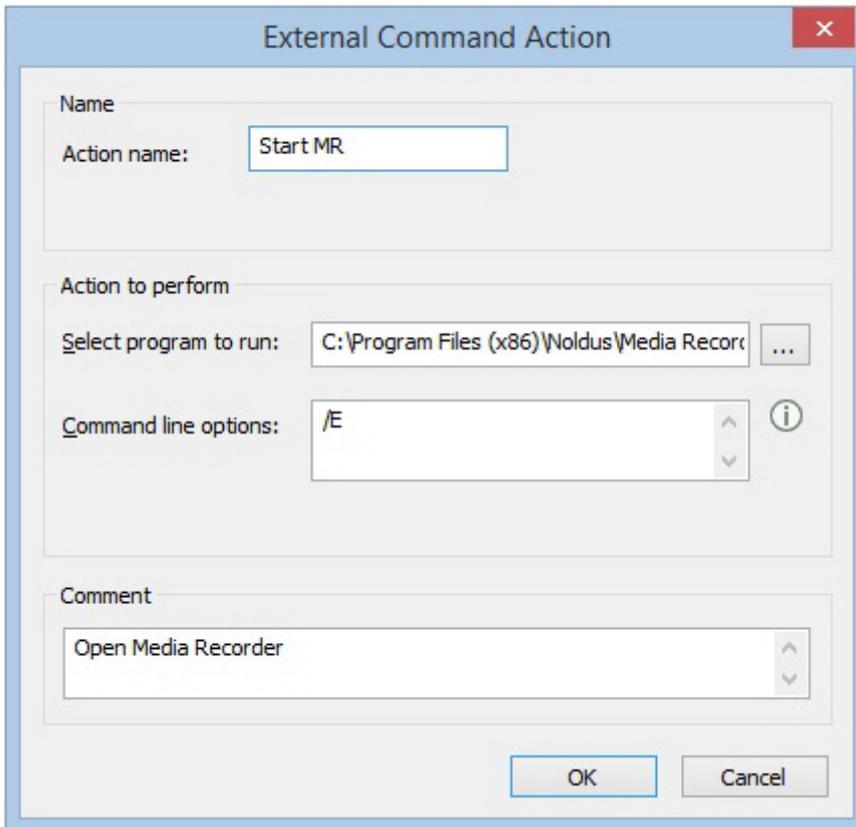
4. Under **Actions to perform**, click the ellipsis button  and browse to **MRCmd.exe**. By default MRCmd.exe is present in the folder C:\Program Files\Noldus\MediaRecorder 6\MRCmd.exe.
5. Enter one of the commands that are available for MediaRecorder (/E, /R, /S, /X or no command) as a **Command line option**.

See [Use commands](#) in [Record video](#)

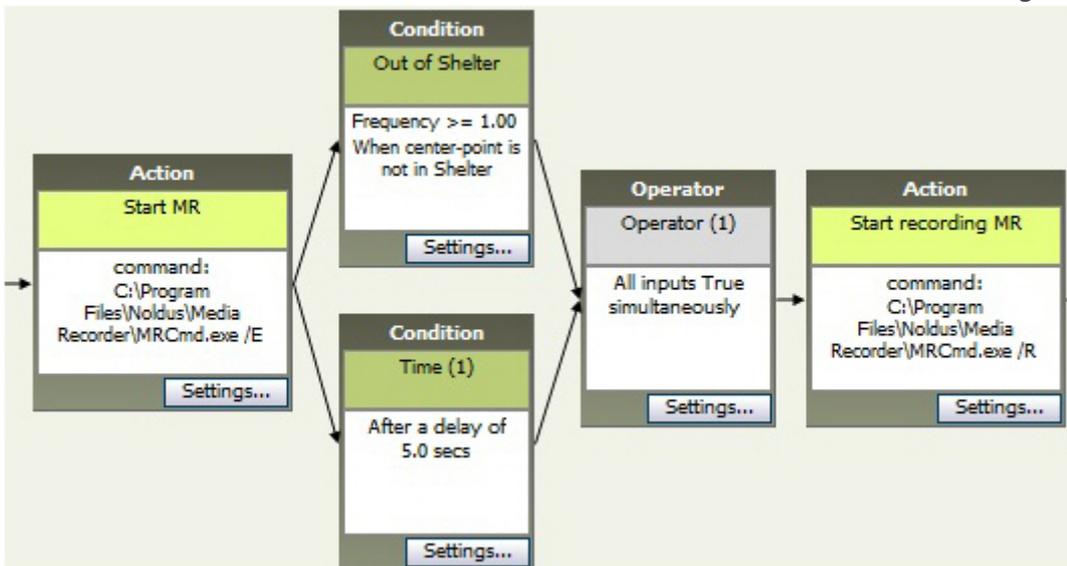
Example

You carry out live tracking during a 24-hour period and you want to make a recording in MediaRecorder, but only when the animal leaves the shelter.

1. Create an external command condition with the command `/E` to start MediaRecorder.



2. Insert a Condition Out of shelter. Combine this condition box with a **Time** condition, because opening MediaRecorder takes a few seconds. With a Time condition you make sure that MediaRecorder is open before recording starts (see the figure below for an example).
3. Insert an External command box with the command `/R` to start recording.



4. Similarly, you can stop recording (Command line option: `/S`) when the animal enters the shelter again.

Notes

- For an extensive description of how to use Trial Control, see Trial Control in the EthoVision XT Help or the Reference Manual - Trial and Hardware Control in EthoVision XT.
- **IMPORTANT** Allow enough time between the actions. If a command is sent before the previous one is carried out, the second command is not carried out. For example, if the

command Start Recording is sent before MediaRecorder is completely open, recording does not start.

- There also may be a delay between the issuing the Start Recording command and MediaRecorder actually starting recording. This delay results in missed frames at the beginning of the video file. Run a test recording to see how long this delay is. To assess this delay, make for example a video of a digital clock and check the interval between issuing the Start Recording command and recording the first frame of the video.

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