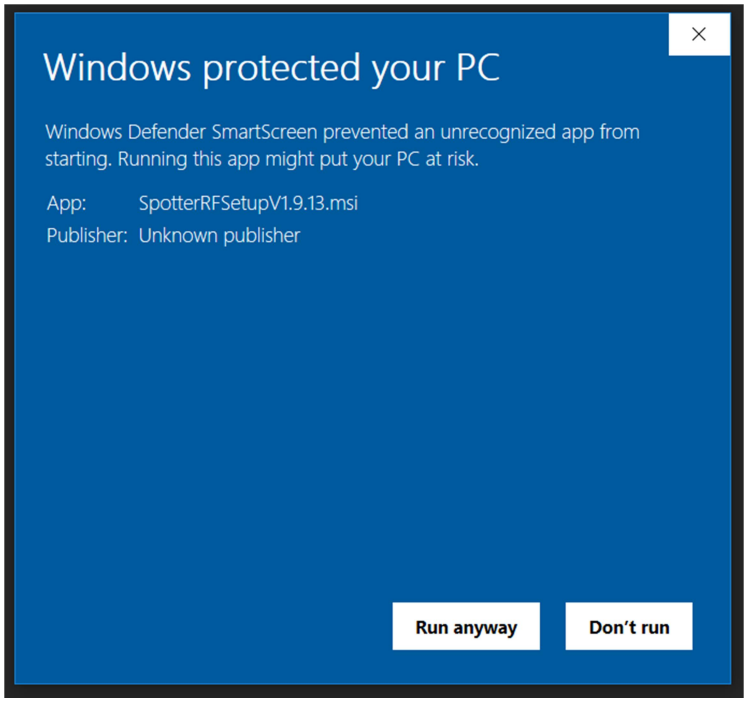
Milestone XP Plugin Install and Configuration Guide (EXTERNAL)

Overview: This guide will serve as a general purpose documentation in how to install the Milestone XP Plugin onto a computer from start to finish. This guide assumes that you already have a preconfigured Milestone and NIO setup.

Accompanying Training Videos: Milestone SpotterRF XP Folder
Must Install: C++2015, C++2013 and Milestone Legacy Device Pack

Step 1: Install SpotterXP Plugin.

Step 1A: Download the SpotterXP client. To do that, go to this WEBSITE. Execute the downloader, which should be a simple install. Click Yes/Accept to any questions. Once the install has finished, you will need to restart your computer/server. FYI, Windows may see the file as potentially dangerous. SpotterRF didn't write it, so it could be, but select Run. Anyway if it does pop up (you'll need to click "more info" first).



Step 2: Upload your SpotterXP license to Milestone.

Step 2A: Open up XProtect Management Client and click on Licensing Information on the left pane. Reactivate your license. Once reactivated you should see that your SpotterRF plugin showing an Expiration Date in the future, like below:

Installed Products

Product Version	Software License Code	Expiration Date	Milestone Care Plus	Milestone Care Premium
XProtect Corporate 2018 R3 Test	M01-C01-123-02-6C42C8	10/11/2019	N/A	N/A
Milestone XProtect Smart Wall	M01-P03-100-02-6CE2A5	Unlimited	Unlimited	
SpotterRF v1.9.14.0	N/A	1/5/2019	1/5/2019	

Step 3: Create a folder within the Milestone folder in the C drive and add privileges.

Step 3A: Must create folder as follows:

Go to C:/inetpub/wwwroot

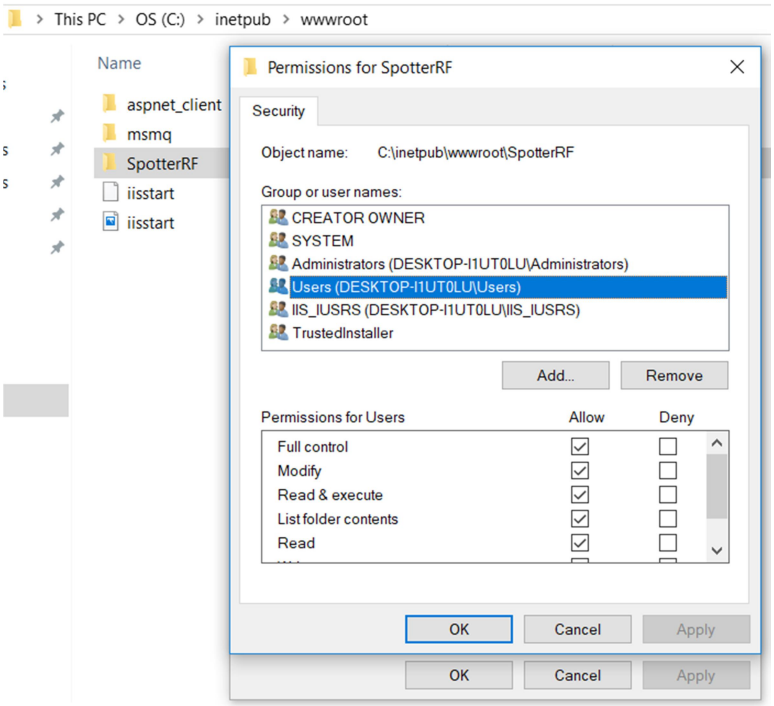
Create a folder named: SpotterRF

Right click on that folder and select Properties

Click on the Security tab and select Edit

Give every user in the list Full Control then select Appy/OK

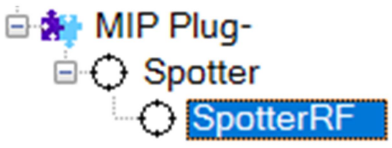
This is where the folder location is.

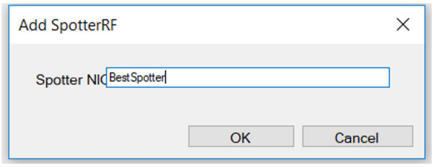


Step 4: Now it is time to add the NIO to Milestone.

Note: Make sure before you begin there must be two accounts on the NIO. An Admin and Viewer account.

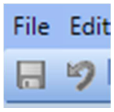
Step 4A: From Milestone XProtect Management Client click on MIP Plug, then Spotter, then SpotterRF. Right click and select Add New. Input a name of your choice. One word, no special characters.





Step 4B: In the newly created section, click on the new item. Fill out the information for your NIO. NIO Name, IP Address, Username, and Password. The NIO Name can be anything you want. The IP Address, Username, and Password will pertain to the particular NIO. This is where you'll add the Viewer account you created earlier.

Step 4C: Once all the fields have been filled out make sure to click Save, in the toolbar in the upper left.

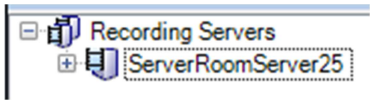


Step 4D: Now we can test whether or not Milestone has linked to NIO and is receiving data. SpotterXP does not take a video stream, but images of NIO and then streams those to Milestone via RTSP. To view if Milestone is seeing NIO, open that SpotterRF folder you created earlier and you should see two image files in there.
They should be updating about once a second.

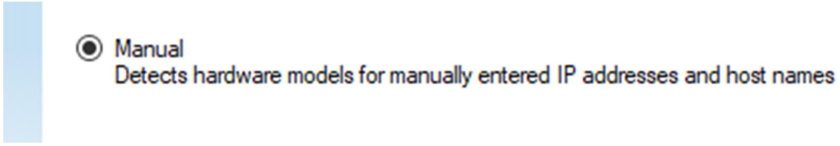
Note: If you don't see the images, you probably didn't install Visual C++ 2013 and 2015. You may also attempt to reboot the Milestone Server at this point. See links at the top.

Step 5: Now it is time to add NIO to Milestone.

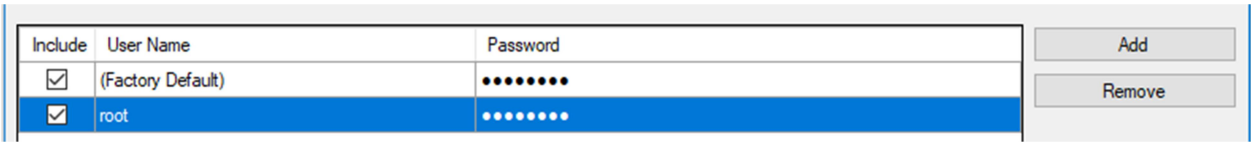
Step 5A: Click on Recording Servers, expand the top level group, then right click on the recording server below it and select Add Hardware. Should be the recording server you created when you installed Milestone.



Step 5B: Choose the Manual installation.



Step 5C: Uncheck all but the (Factory Default) option.



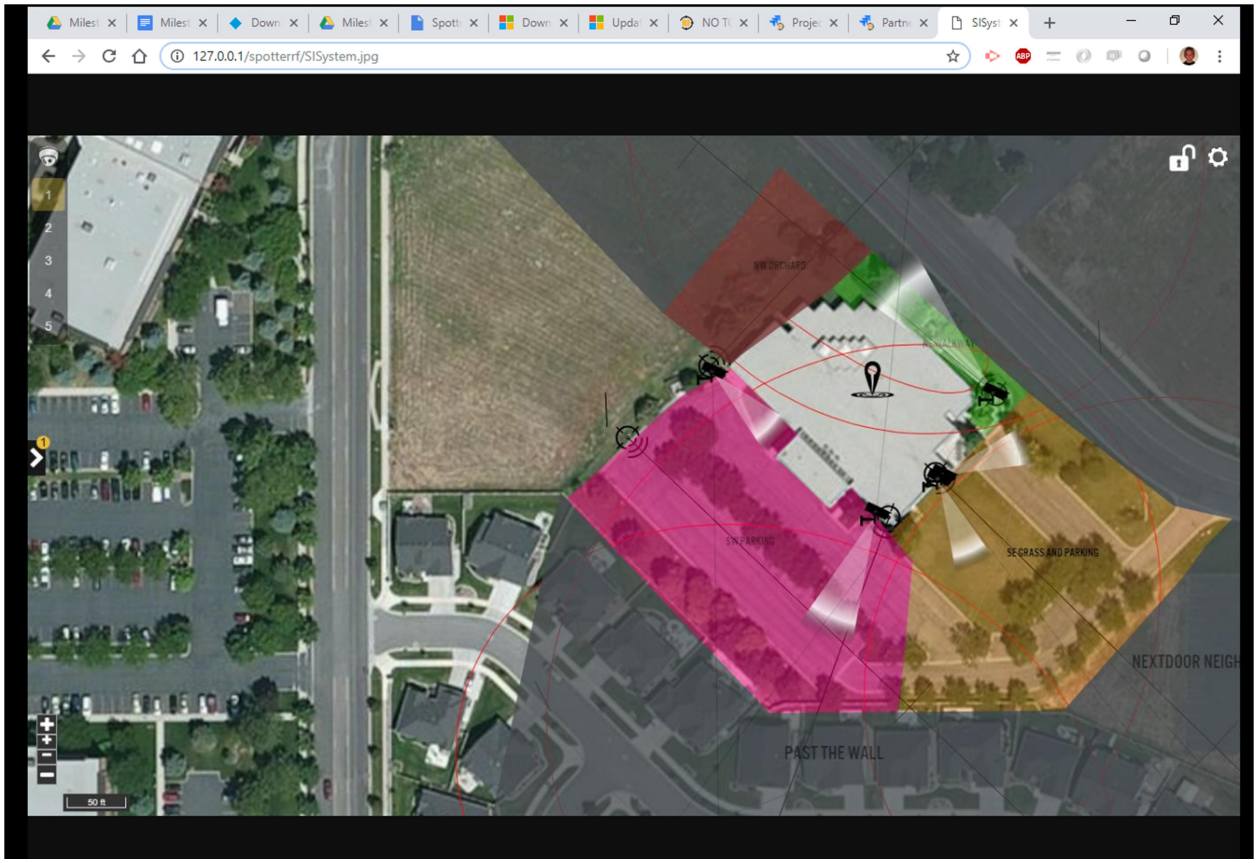
Step 5D: Select the driver based upon the NIO you're looking to add. The XProtect

Legacy Driver Pack is compatible, but not necessary. This driver is found under the Other category.

You can use Universal 1 Channel Driver, under the Universal category.

Don't use the NIO's IP address, we're going to use Milestones local address (using the files from the SpotterRF folder we created earlier). That address is: 127.0.0.1. You can test this first by going to: 127.0.0.1/spotterrf/SISystem.jpg in your browser.

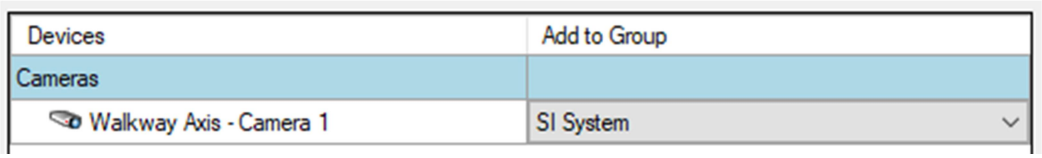
- SISystem - the name of your NIO that you created under the MIPS section.



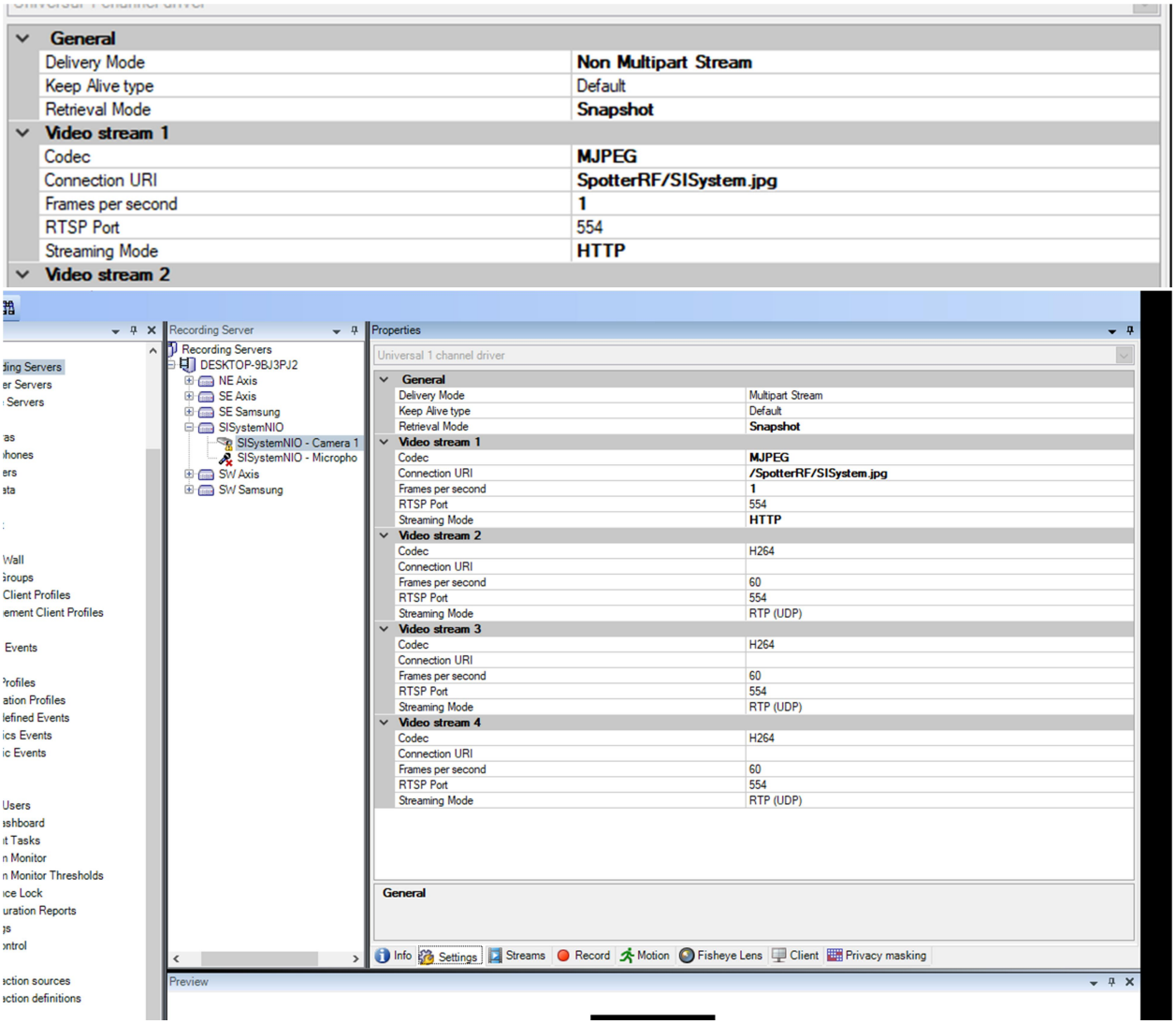
Step 5E: Now Milestone will attempt to reach out to the NIO to add it. If you entered everything correctly you'll be greeted with happy green checkmark.

Step 9F: Milestone will then repeat this process, but will add the NIOthis time.

Step 5H: Now it is time to add it to a group. We only have one so we added it to that.



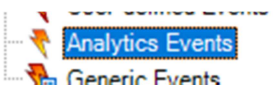
Step 5I: Once the NIO device has been added. Click on it and in the Settings tab add the following, and then save.



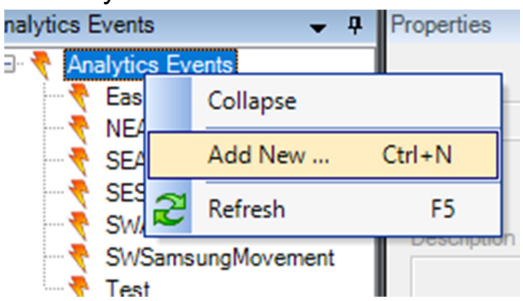
Step 6: We're now going to create Analytics Events within Milestone.

Note: We now have our cameras and NIO in Milestone. Now it is time to create the rules necessary to get Actions from NIO working. In this order, within Milestone, we need to create Analytics Events, Alarm Definitions, and Rules.

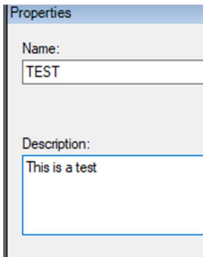
Step 6A: Click on Analytics Events in the left toolbar



Step 6B: Right click on Analytics Events in the second to the left pane.

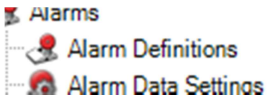


Step 6C: Fill out the Name and Description field for the new Analytics Event. Then click Save, little floppy icon, in the upper left.

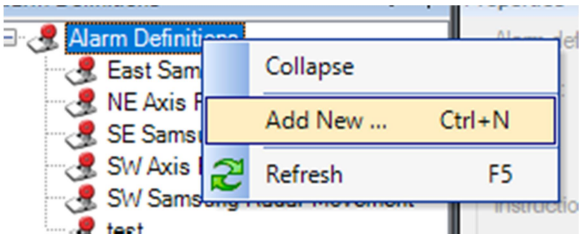


Step 7: Now we're going to create an Alarm Definition, using our newly created Analytic Event.

Step 7A: Click on Alarm Definition on the left pane.

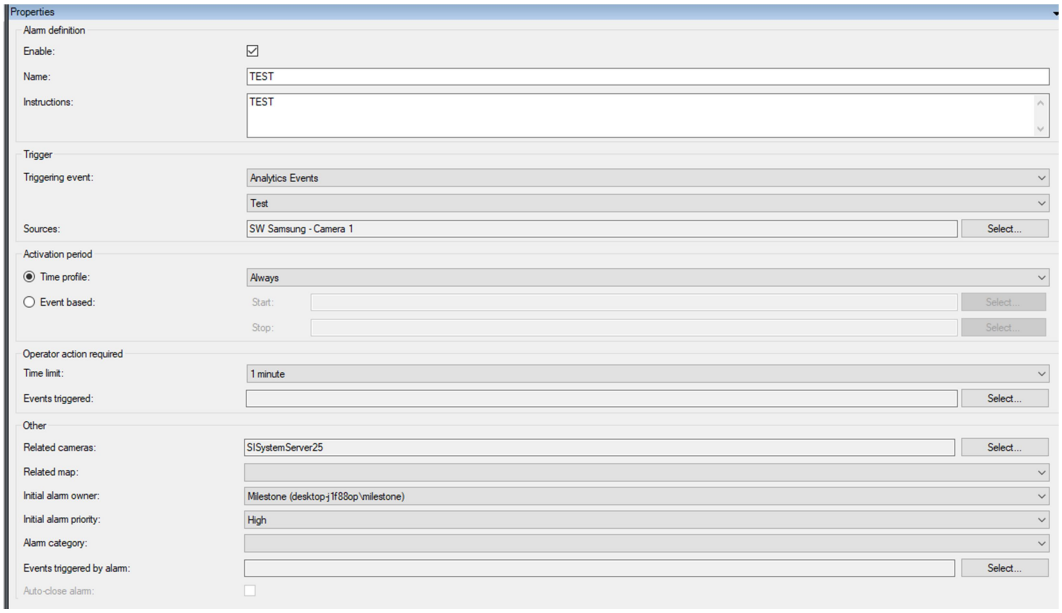


Step 7B: Right click on Alarm Definitions from the second to the left pane and select Add New.



Step 7C: Fill out the follow fields. Then click Save.

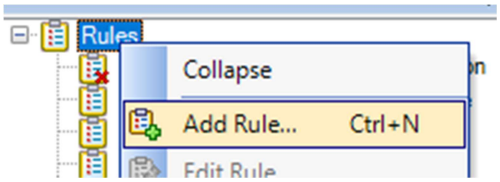
- Name: Name of the Alarm Definition.
- Description: Something that will help someone understand what this is.
- Triggering Event: Analytics Event
- Sources: Camera you want to record with.
- Related Cameras: Add the NIO
- Initial Alarm Owner: Account that controls Milestone software



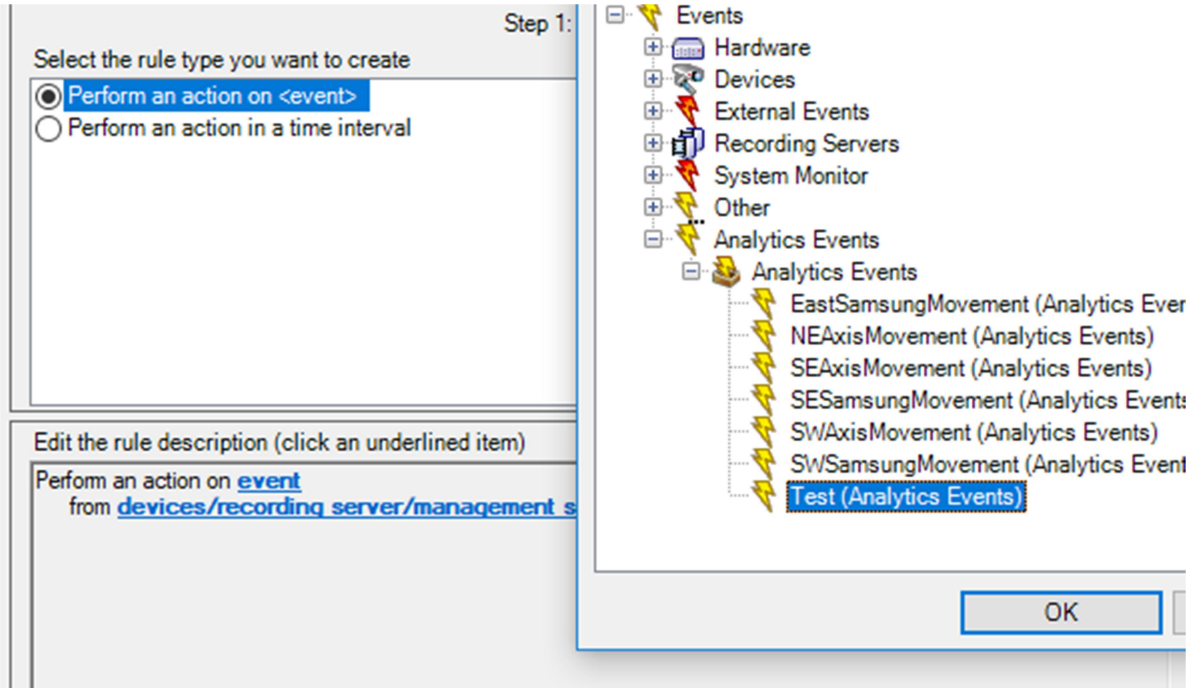
Step 8: Now we're going to create a Rule in Milestone. This process is a dynamic window that walks you through step by step. As you define you Rule you will notice new options on the lower window. The lower window acts as a step-by-step explanation of the event you're creating. Every hyperlink you see in the lower window is an option that needs to be filled out for the Rule to work correctly. The response to each hyperlink will make sense based upon the sentence the hyperlink is a part of. For example, the first hyperlink will be in the sentence (Perform an action on event) Click event and this is where you select our Analytics Event we created earlier. The rest will follow similarly.

Step 8A: Click on Rules in the left pane.

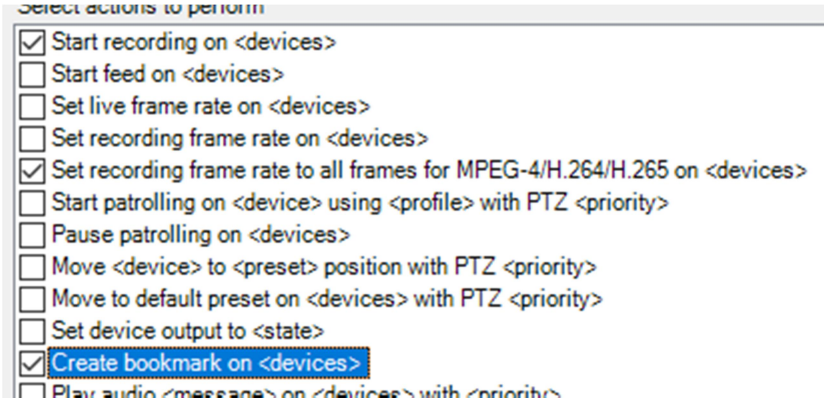
Step 8B: Right click on Rules in the second to the left pane, and select Add New.



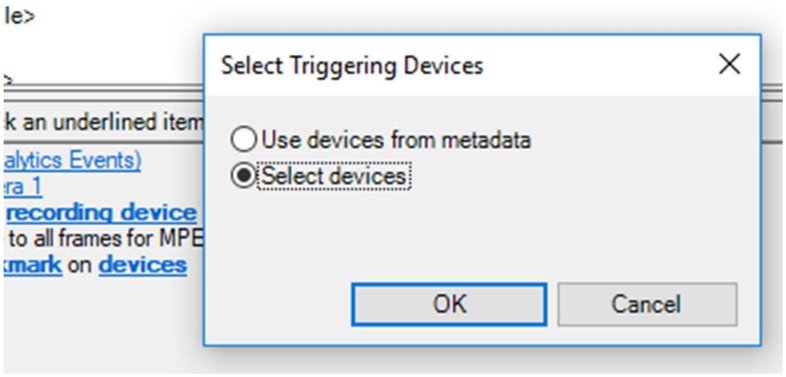
Step 8C: Name your new Rule to something that will make sense later. Also select Perform an action on <event>. In the newly open window select the Analytics Event we created earlier. Next click on devices/recording server and select the camera and NIO that you want to record from. Technically all you need to select is the camera, but we also select the NIO as well so we can see a view on both.



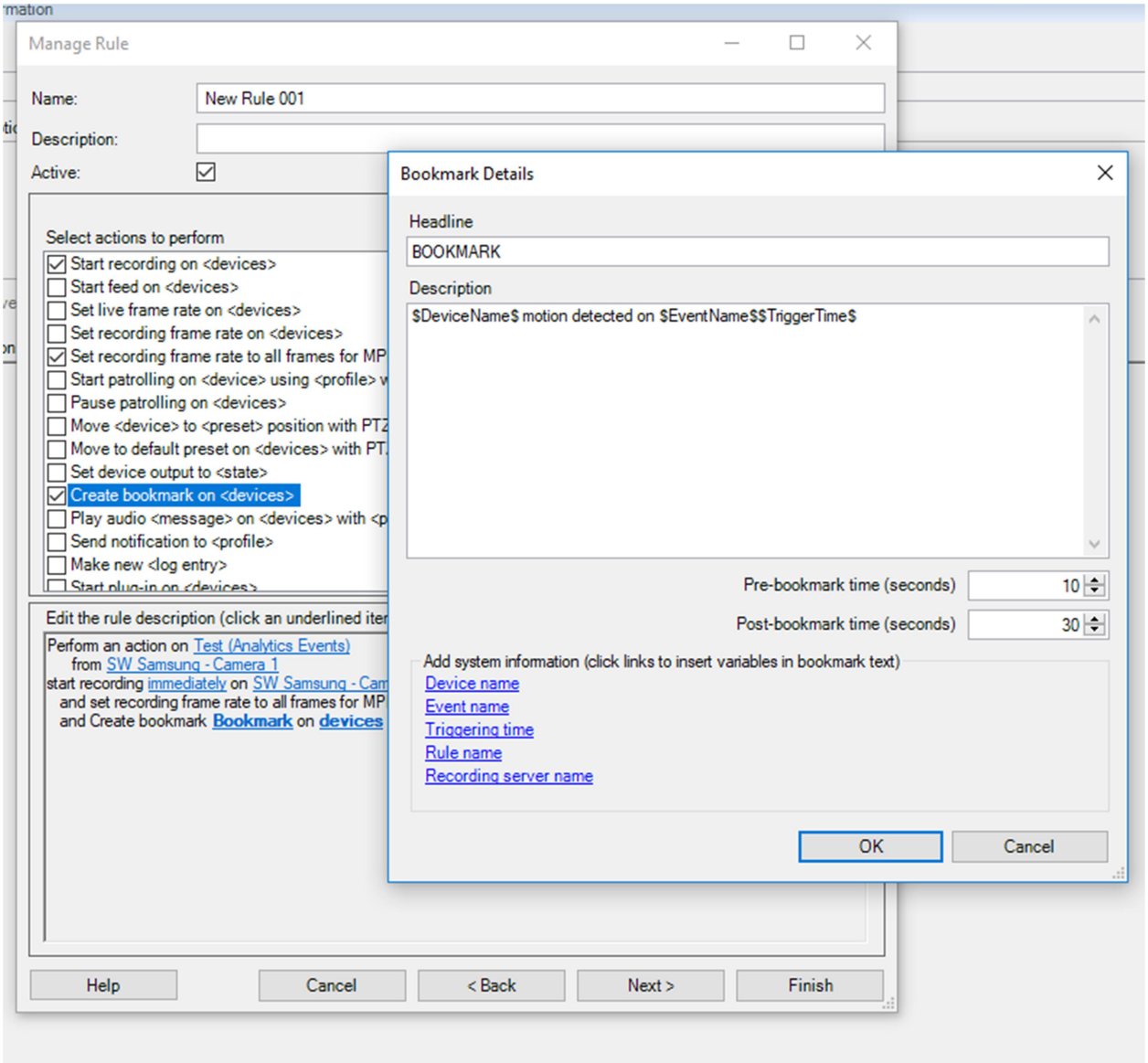
Step 8D: Click Next. Now select the following options, Start recording on <devices>, Set recording frame rate to all frames on MPEG-4/H.264/H.265 on <devices>, and Create bookmark on <devices>. Essentially we're telling the Rule to record, boost framerate to 30FPS, and create a bookmark on the recording. In the lower window this is where you'll click on the hyperlinks and fill out the responses accordingly.



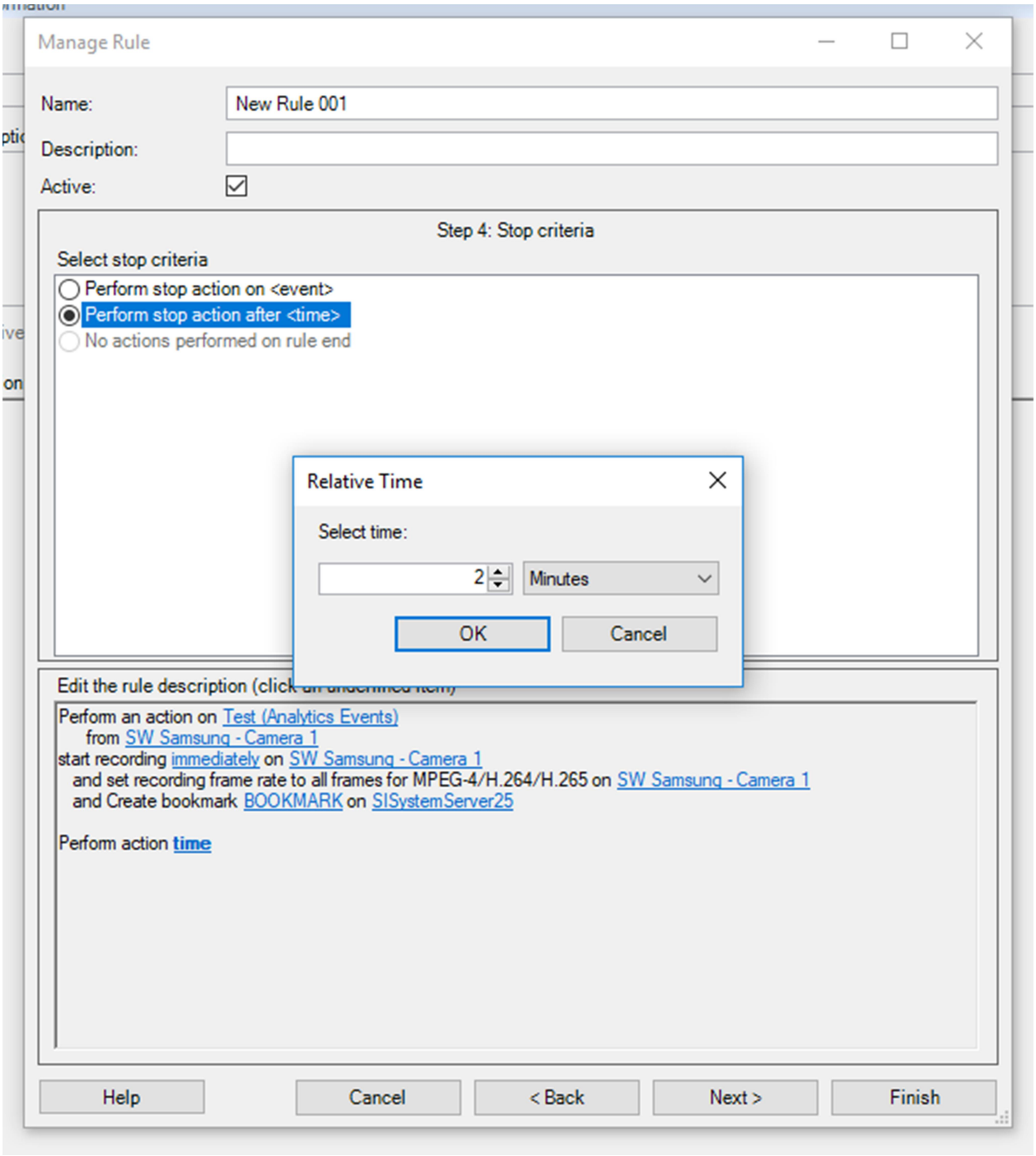
FYI: When you click on Devices select: Select devices, not Use devices from metadata.



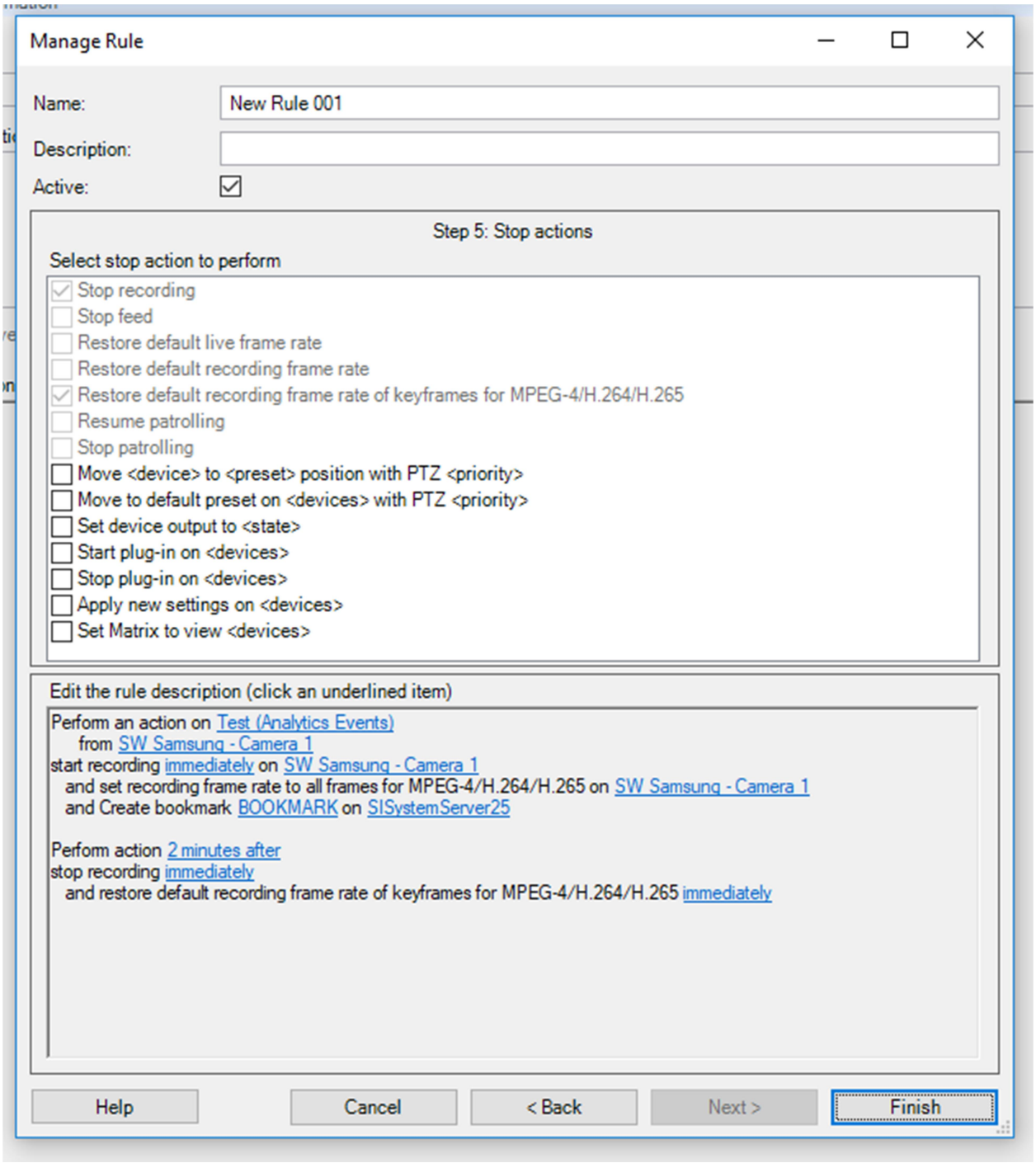
FYI: When you create a Bookmark make sure you fill it out so that it will make sense to someone who will look at it later.



Step 8E: Click Next once all fields in the lower window have been fill out. Now we're going to tell Milestone when to stop the Rule, i.e. end the recording. Our option here is to stop after an amount of time. Usually 2 minutes is good.

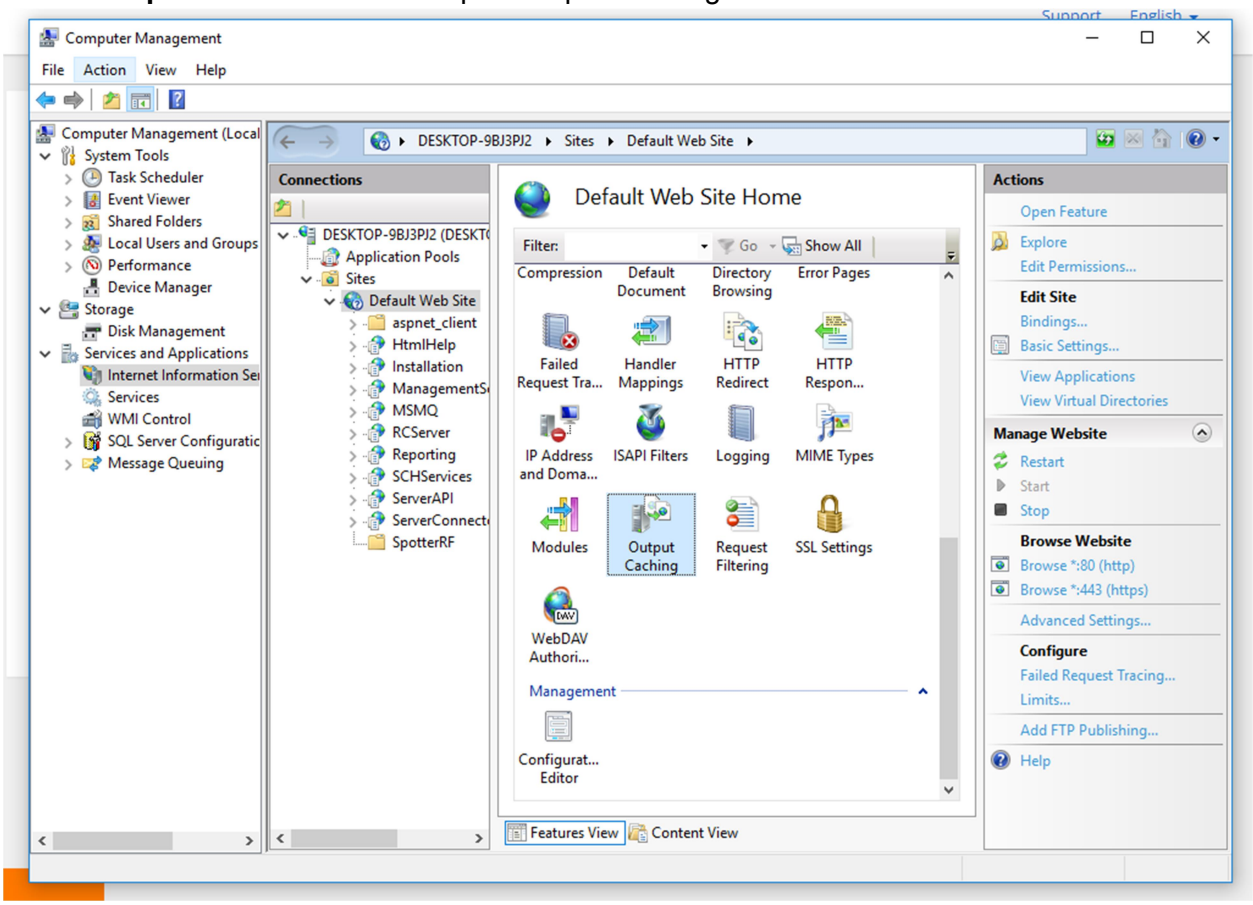


Step 8F: This is what a completed Rule looks like.

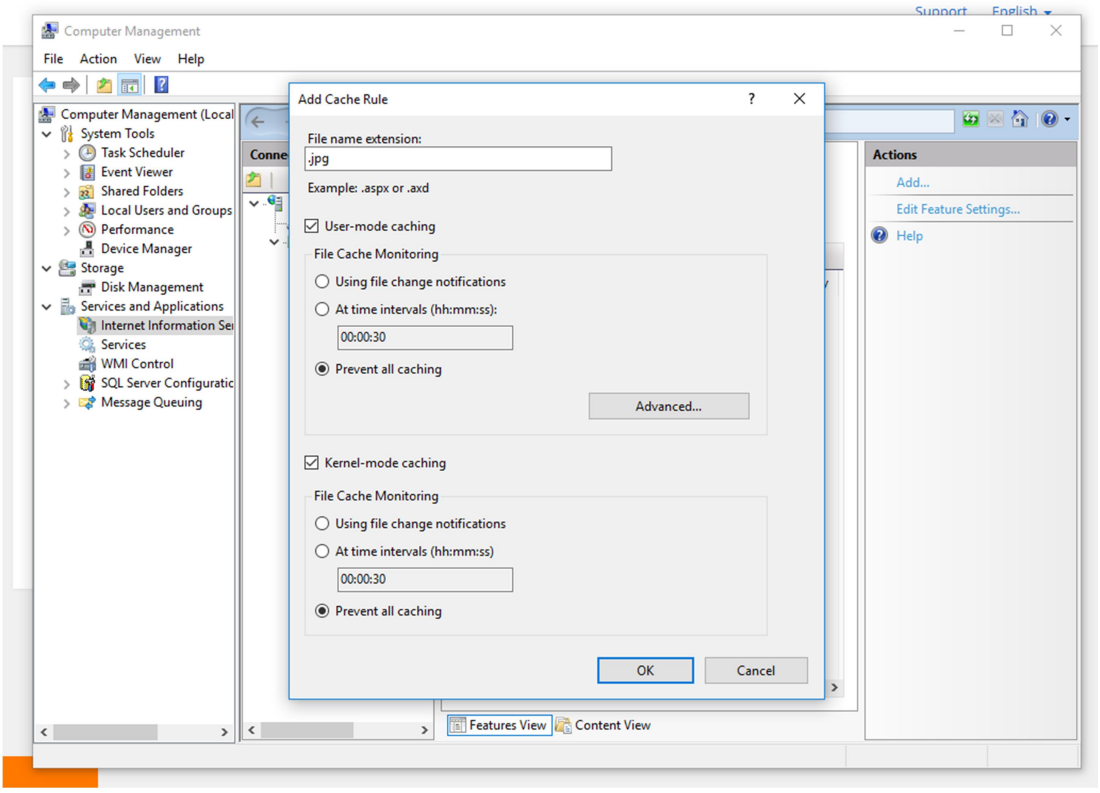


Step 9: Now we have to disable Output Caching in Windows. This is so that Windows doesn't cache (not update) the NIO images being streamed to our SpotterRF folder we created earlier.

Step 9A: Click start and search/open Computer Management.
Step 9B: Expand Services and Applications
Step 9C: Click on Internet Information Services
Step 9D: Scroll down and open Output Caching



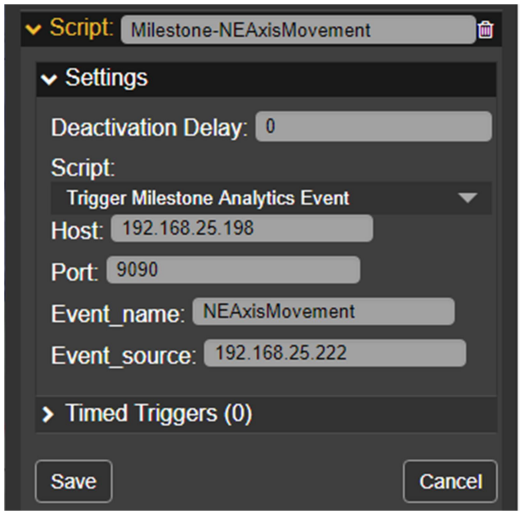
Step 9E: Right click and select Add…
Step 9F: Select Prevent all Caching for User-Mode Caching and Kernel-Mode Caching.



Step 9G: Click Save.

Step 10: Now we need to create an Action within NIO and add it to a zone. You know how to do that, but here is what the Action will look like.

FYI: Host is the IP of the computer that is running Milestone. Port default is 9090, but can be changed within Milestone. Event_name: is linked to the name of the Analytics Event you created in Milestone. THIS IS VERY IMPORTANT, WON'T WORK IF THIS DOESN'T MATCH. Event_souce: links to the camera you wanted to record.



Step 11: Within NIO, inside of the Milestone Action, click Test Action. You should see a green light. If you don't, Port 9090 may be blocked. Within Milestone XProtect Smart Client, you should see a new Alert. If so, it worked.

Caveats: Undocumented issues we ran into while configuring Milestone.

- If you need to delete an Analytic Event, Alarm Definition, or Rule make sure you do it in a particular order. The order is as follows, delete the Rule first, Alarm Definition second, and the Analytic Event third. This is because a Rule uses an Analytic Event and an Alarm Definition uses an Analytic Event. If you delete an Analytic Event the Rule/Alarm Definition that pointed to said Analytic Event breaks, which breaks the Analytics Server.