



CONFIGURATION GUIDE DAVANTIS / XPROTECT



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1.1. INTRODUCTION

This document describes the configuration needed for the integration between Milestone XProtect Video Management System and DAVANTIS video analytics systems.

It contains the necessary steps to send alarms from a DAVANTIS video analytics system to a Milestone XProtect VMS platform and the features available to check the recorded video associated to the alarms.

The goal is that an operator using the Milestone XProtect Management Application and Smart Client can verify analytics events with a snapshot and a video using the same graphical interface than for other devices.

Milestone XProtect VMS integration is available for DAVANTIS software Daview v167 or higher.

1.2. COPYRIGHT

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1.3. CONFIDENTIAL NOTICE

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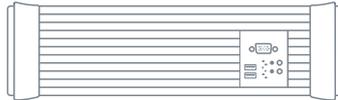
2.1. ARCHITECTURES

CAMERAS



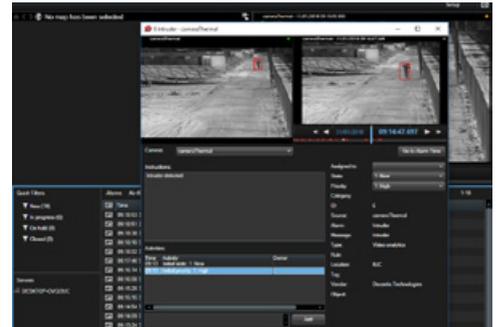
CAMERA
STREAMS

DAVIEW



ALARMS/
EVENTS

XPROTECT VMS



CAMERAS



CAMERA
STREAMS

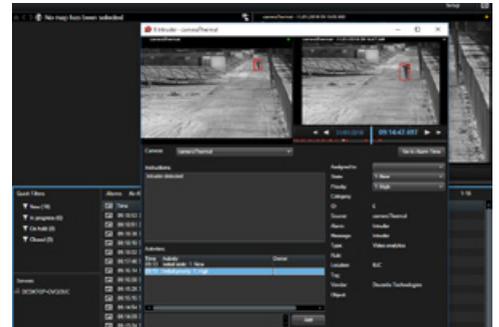
DAVIEW



ALARMS/
EVENTS

RTSP
W/
META-
DATA
(Optional)

XPROTECT VMS



CAMERAS



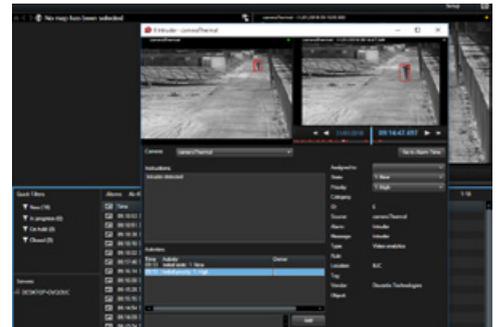
MILESTONE
ONVIF BRIDGE

DAVIEW



ALARMS/
EVENTS

XPROTECT VMS



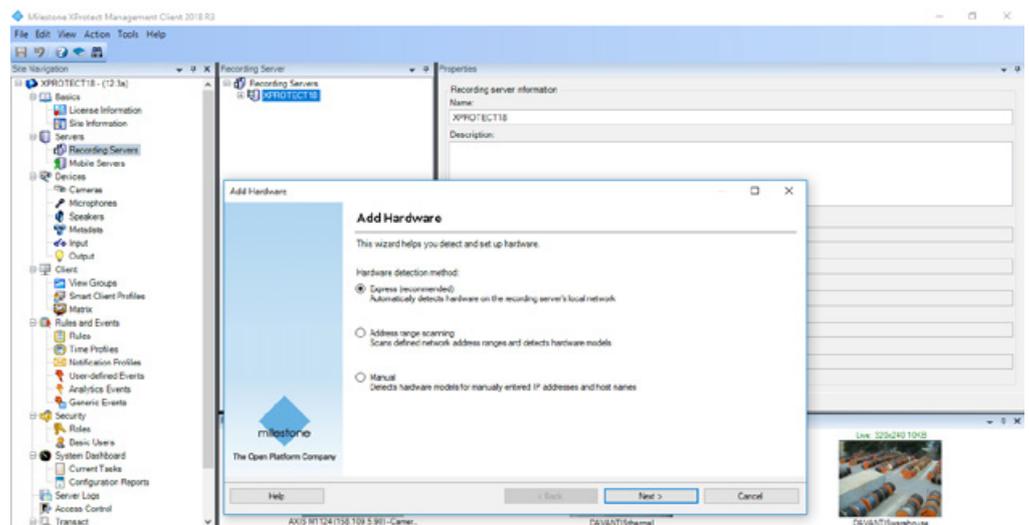
2.2. ADD DAVANTIS STREAMS TO XPROTECT

Prior to adding DAVANTIS streams into XProtect, we first need to enable the feature “virtual ONVIF camera” for all desired DAVANTIS streams at the DAVANTIS units (see “3.2. Enable virtual ONVIF camera feature”)

Recording DAVANTIS streams is an advanced and optional feature that will allow the user to get and record live feed from the DAVANTIS units. The DAVANTIS streams include a detection bounding box around the intrusion. Please notice that is not required, neither necessary, to add DAVANTIS streams in XProtect in order to receive DAVANTIS alarms/events at XProtect.

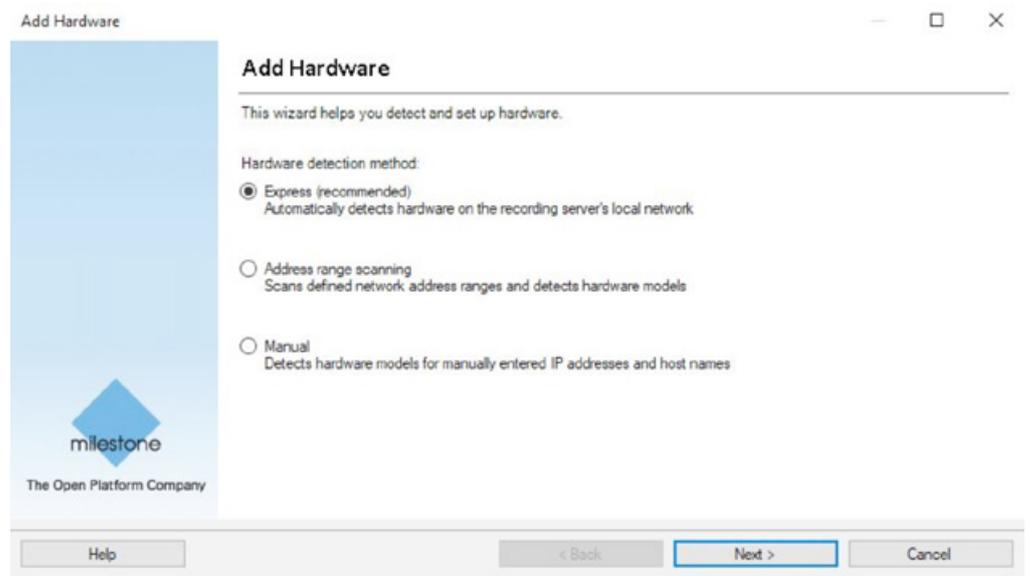
At Milestone XProtect Management Client:

- At the left panel go to “Recording Servers”, right click at the desired server and select “Add Hardware”:

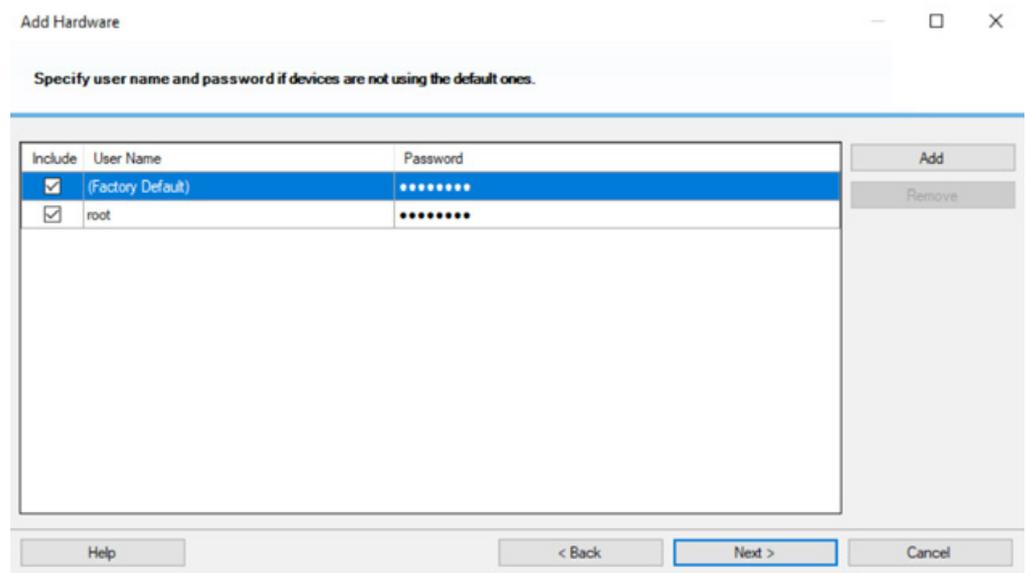


2.2.1. ADDING STREAMS USING "EXPRESS" MODE

Select "Express" option and click "Next".

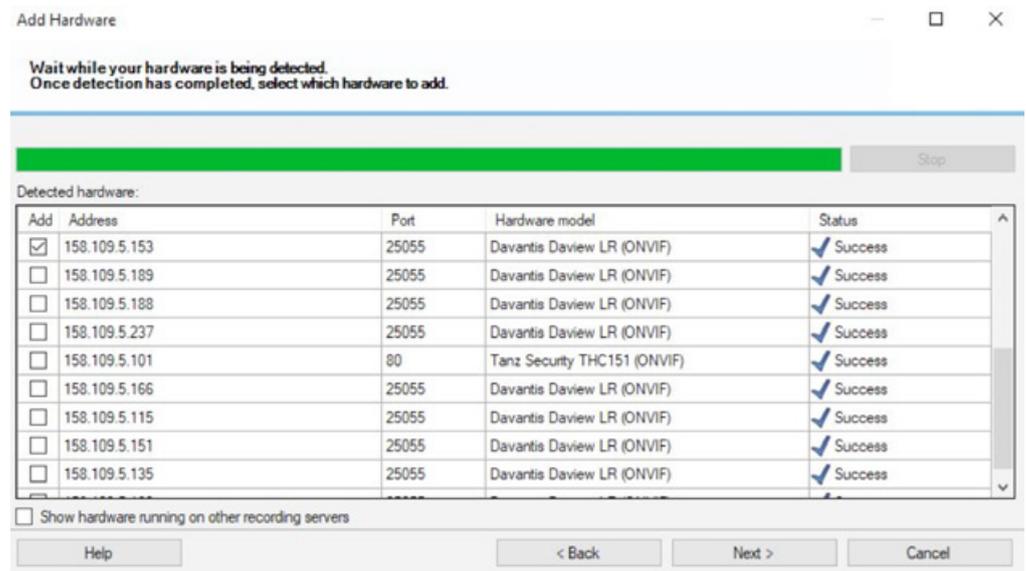


Enter DAVANTIS credentials for the unit and click next. Default credentials are "admin" and blank password.

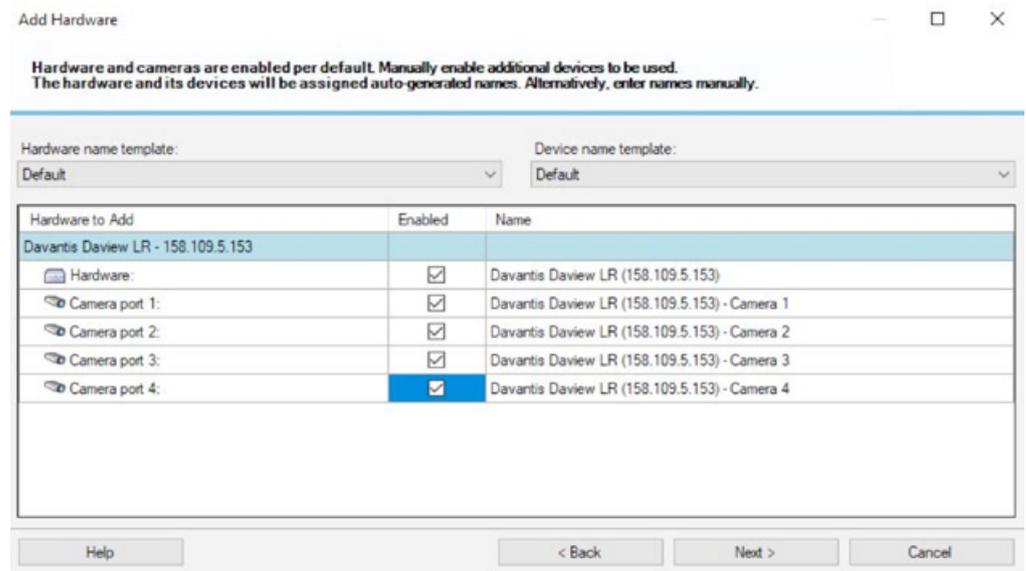


2.2.1. ADDING STREAMS USING "EXPRESS" MODE

Find and select the desired DAVANTIS unit. Click "Next".

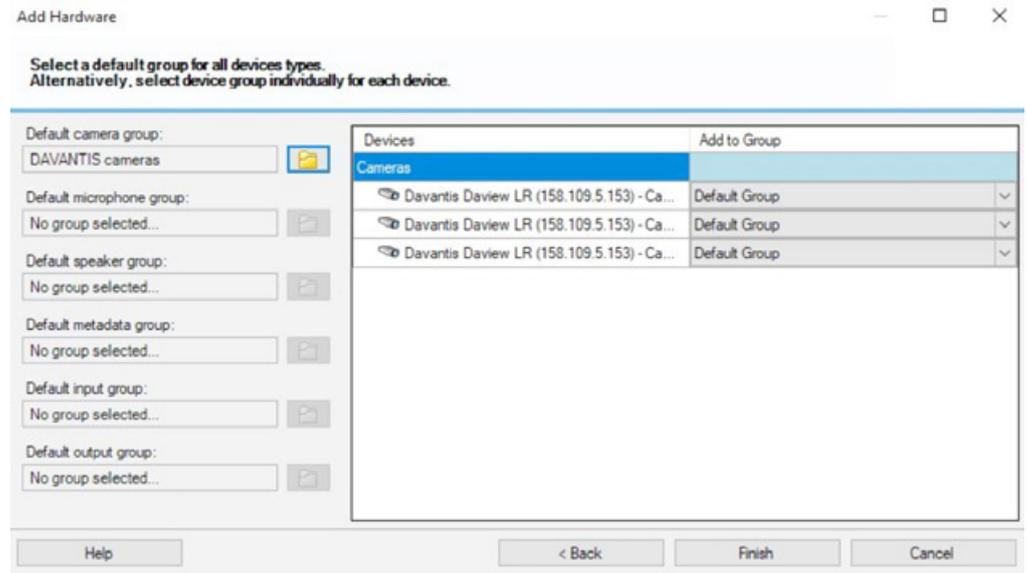


Enable the desired cameras within the unit and click "Next".

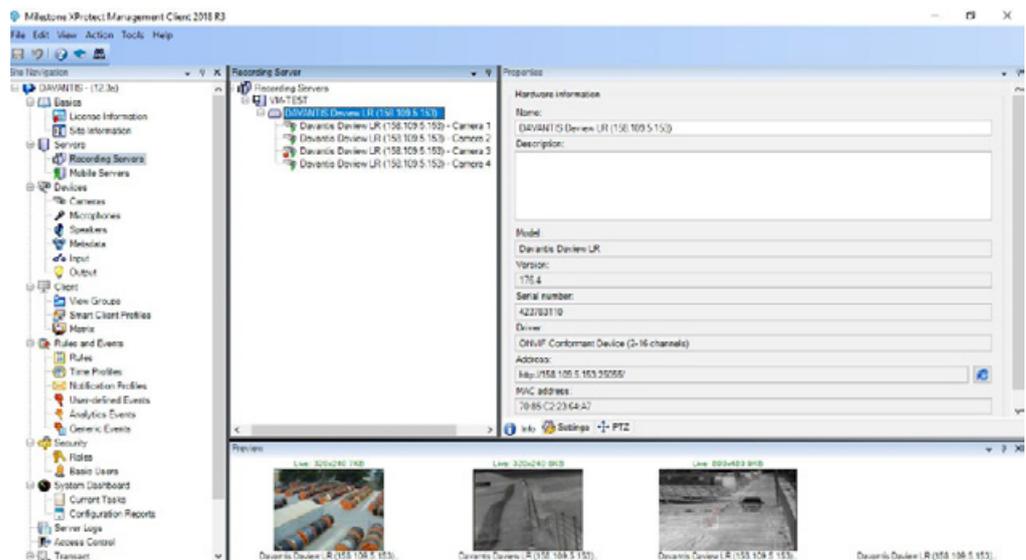


2.2.1. ADDING STREAMS USING "EXPRESS" MODE

Select a default camera group at XProtect and click "Next".

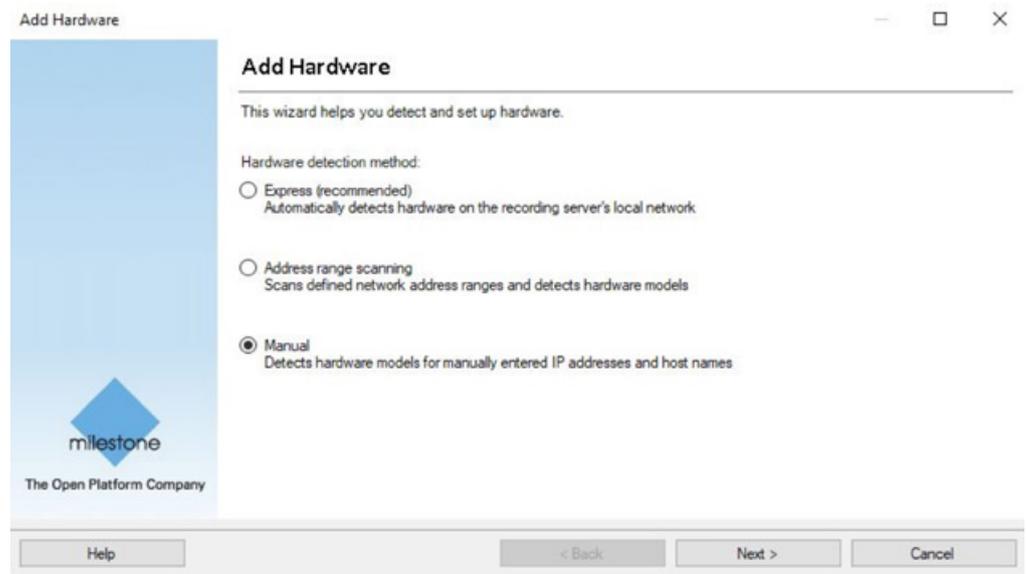


You should now see the DAVANTIS device containing all added streams.

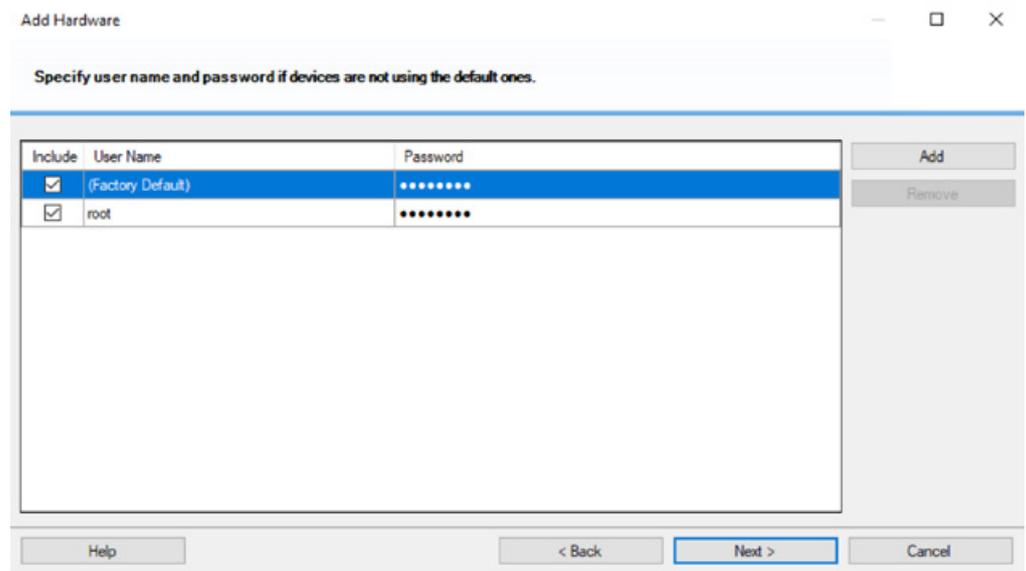


2.2.2. ADDING STREAMS USING "MANUAL" MODE

Select "Manual" option and click "Next".

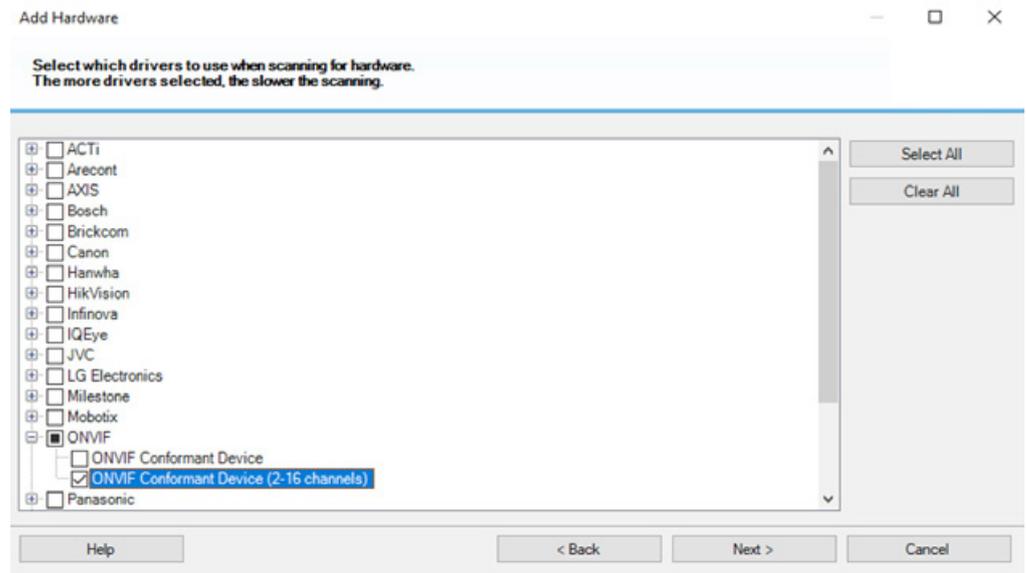


Enter DAVANTIS credentials for the unit and click next. Default credentials are "admin" and blank password.

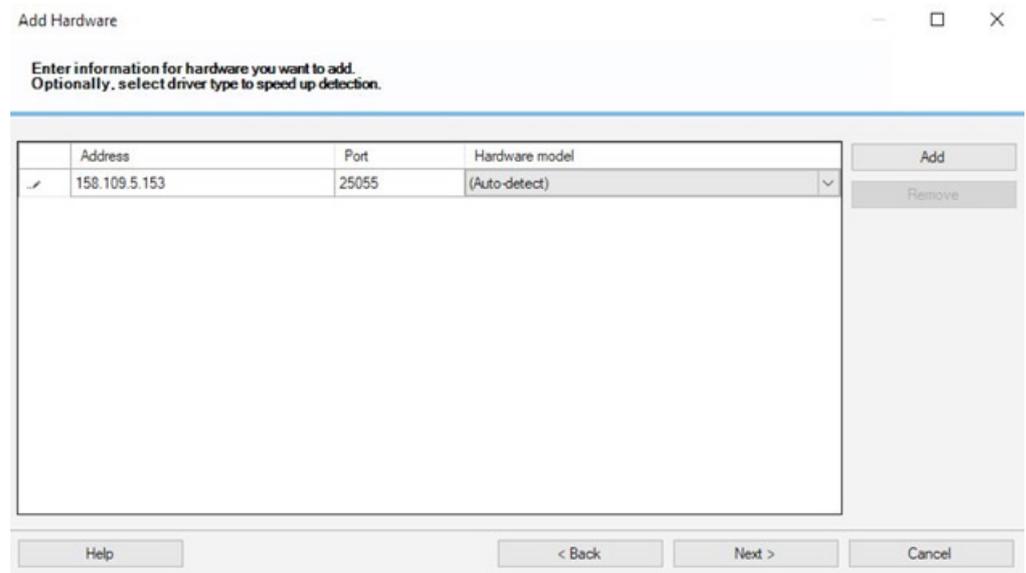


2.2.2. ADDING STREAMS USING "MANUAL" MODE

Select the driver "ONVIF Conformant Device (2-16 channels)" and click "Next".

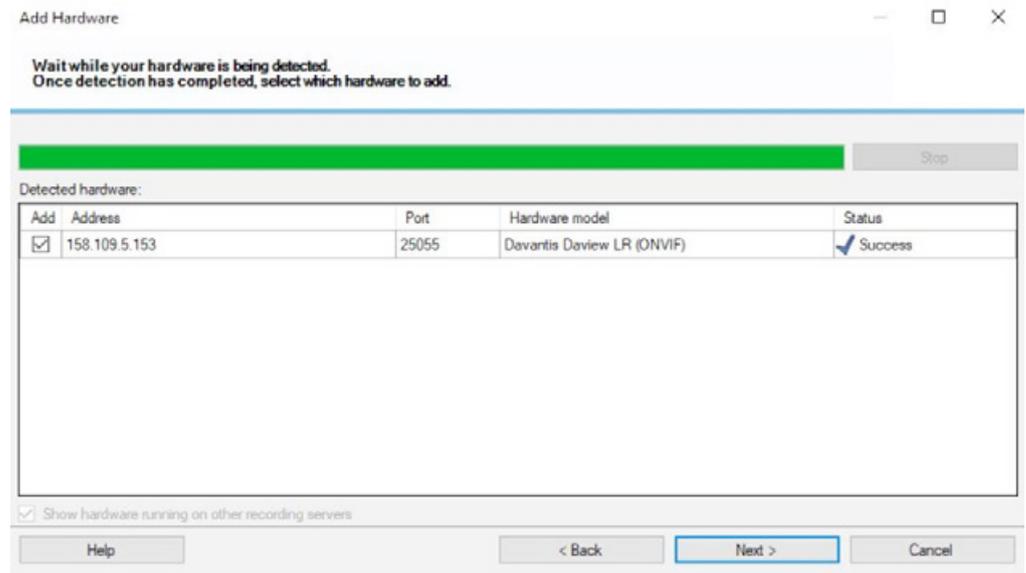


Enter the IP of the DAVANTIS unit and set the port to 25055. Click "Next"

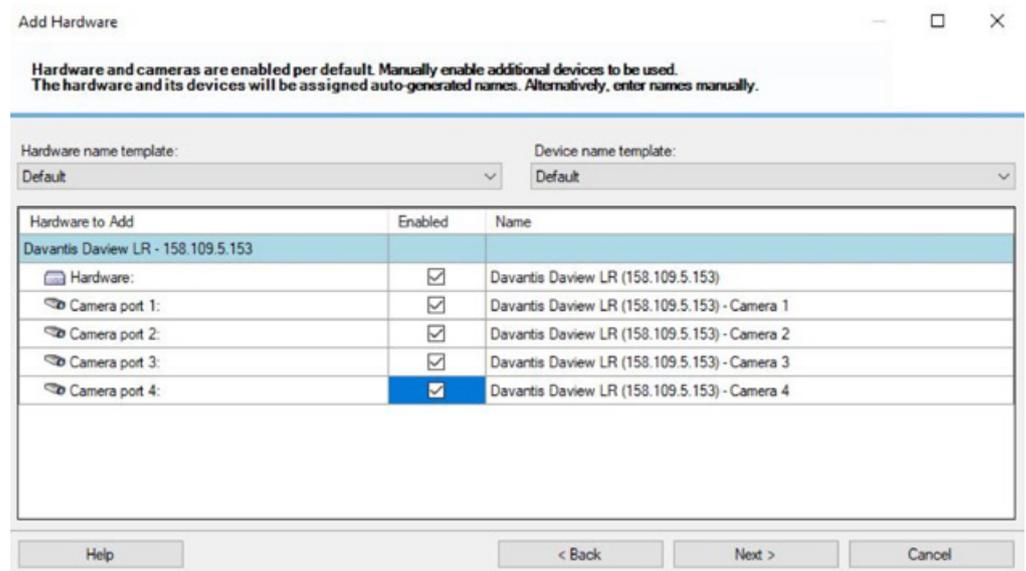


2.2.2. ADDING STREAMS USING "MANUAL" MODE

Click on "Next".

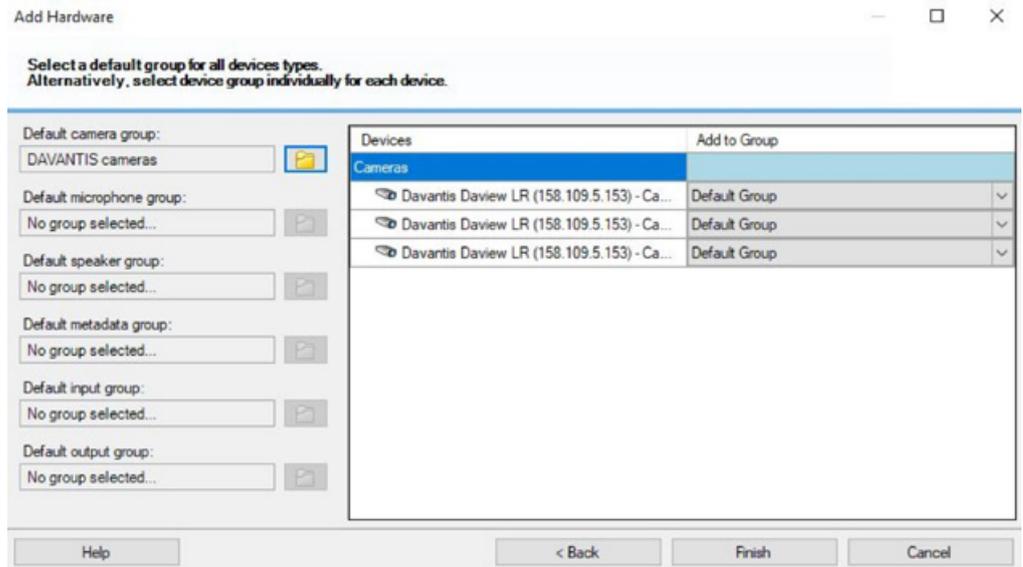


Enable the desired cameras within the unit and click "Next".

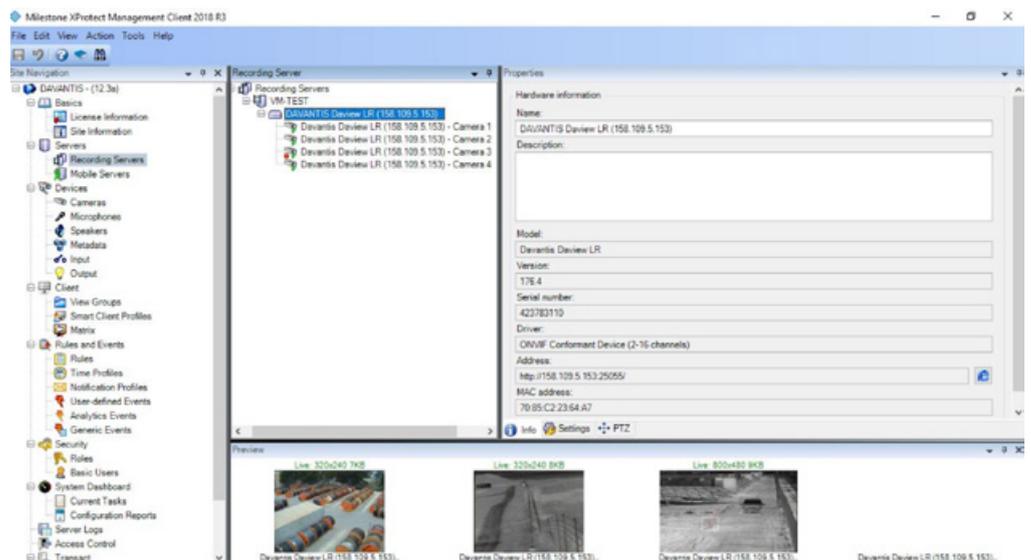


2.2.2. ADDING STREAMS USING "MANUAL" MODE

Select a default camera group at XProtect and click "Next".



You should now see the DAVANTIS device containing all added cameras.

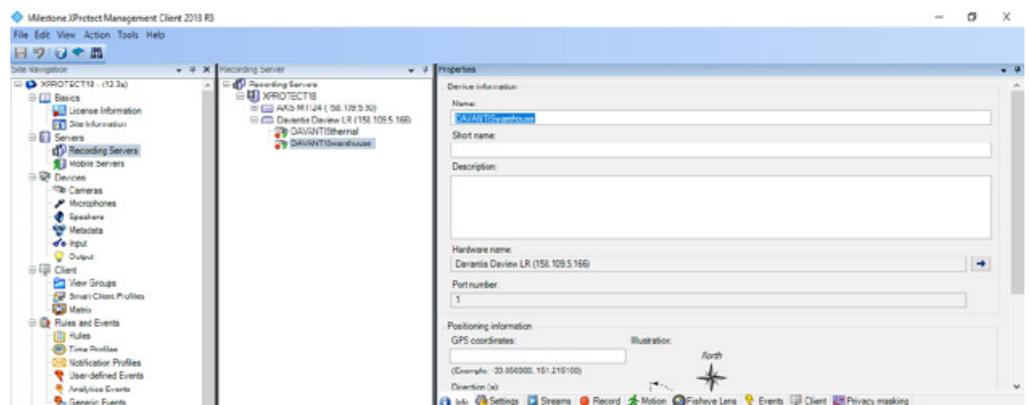


2.3. SET CAMERA NAMES

Camera names of the cameras in Milestone XProtect related to DAVANTIS alarms must be named identically as the camera names defined at the DAVANTIS unit (see “3. Configure DAVANTIS Platform”).

To modify the camera names, at Milestone XProtect Management Client:

- At left panel go to “Recording Servers” or “Devices” section.
- Go to the device Info section of each camera and modify the “Name” field:



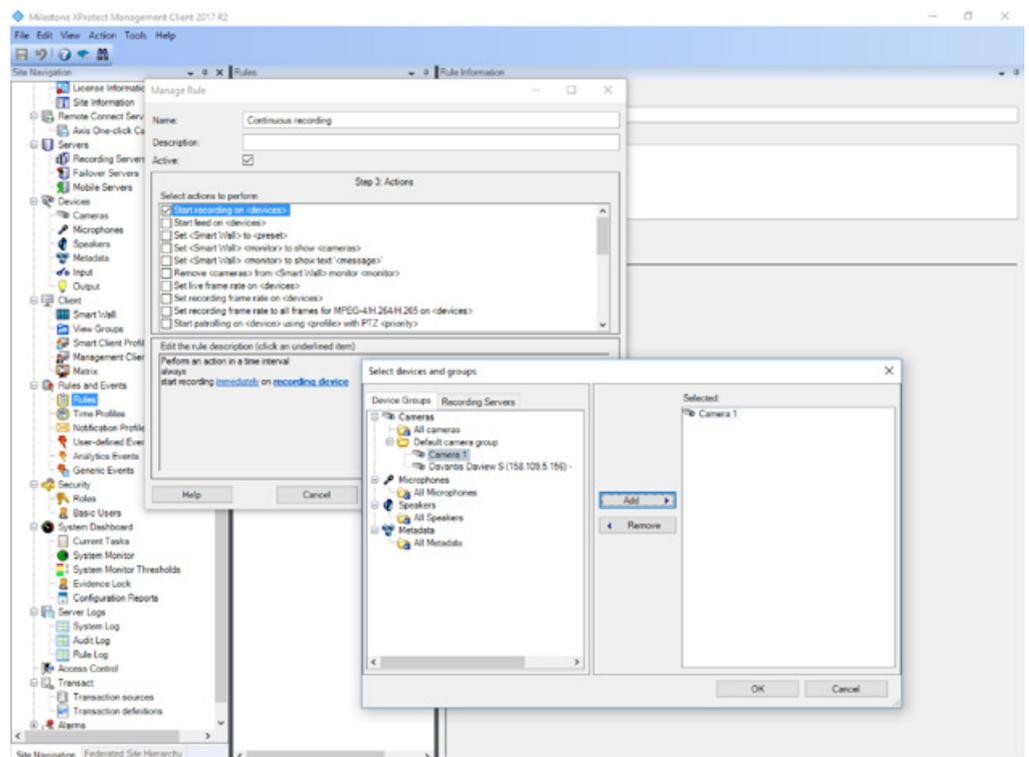
Please take into account that any change of camera names in Milestone XProtect Server requires a DAVANTIS machine restart.

2.4. SET CONTINUOUS RECORDING

For a deeper tracking of the alerts it is recommended to create a “Rule” that sets continuous recording for all DAVANTIS cameras.

In the left panel please go to “Rules and Events”:

- Right click on “Rules”.
- Click on “Add Rule”.
- Set a descriptive name like Continuous DAVANTIS Recording.
- Select “Perform an action in a time interval” and click “Next”.
- Select “Always” and click “Next”.
- Select “Start recording on <devices>”, then click on recording device at the bottom panel and add the DAVANTIS unit cameras, click “Next”.
- Click “Next” again and “Finish”.



2.5. ALARMS AND EVENTS AT XPROTECT

Milestone may receive “Alarms” and “Events”. Alarms will be shown at Milestone Smart Client to the operator but no action will take place in Milestone afterwards.

If DAVANTIS is set to send Alarms (see “3. Configure DAVANTIS Platform”) we don’t need to define anything on Milestone XProtect. If this is the case please direct to step “2.6. Configuring XProtect Smart Client”.

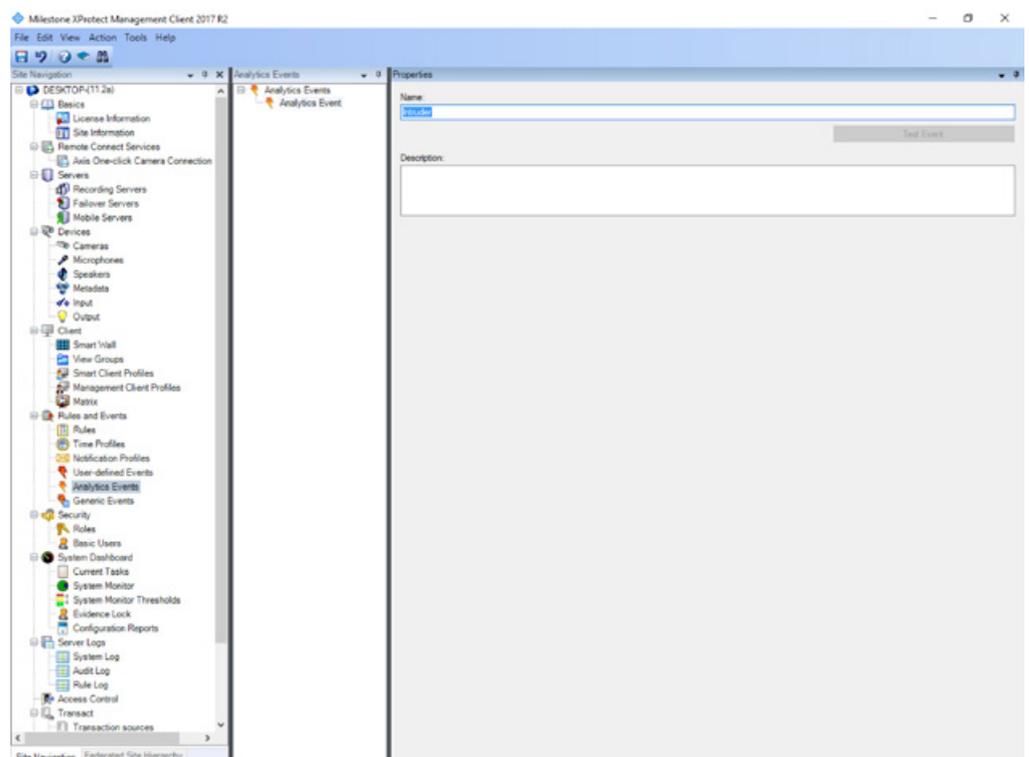
However, if we want to set actions to be performed when an event is raised, we must set DAVANTIS to send Events and define them on Milestone. These events are filtered through “Alarm Definitions”, and when a positive match occurs, an alarm is created with a copy of all the information contained within the analytics event.

This will allow, for example, to set operator actions, priorities or to trigger other events.

Please take into account that the feature “Flexible event rule engine” is not available in all Milestone products.

To define an event, at Milestone XProtect Management Client left panel:

- Go to “Rules and Events” and right click on “Analytics Events”.
- Click on “Add New”.
- The names of the “Analytics Events” must match the detection rule names defined in the DAVANTIS system. There should be a different analytic event at XProtect for every detection rule set at the DAVANTIS system.



2.5.1. ALARM DEFINITIONS

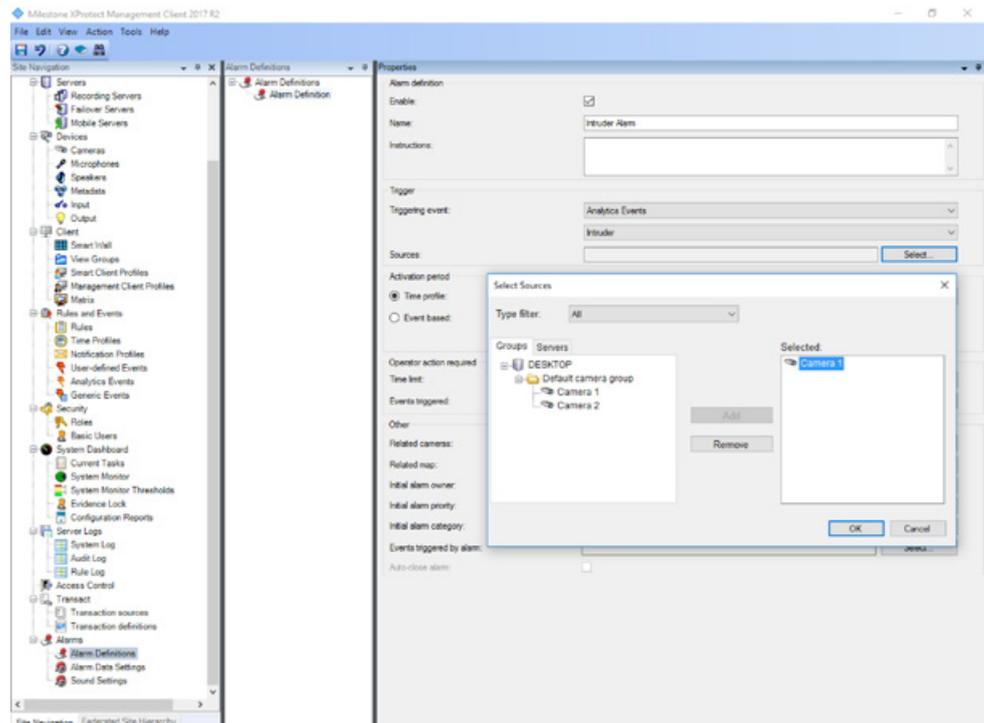
We need to set at least one “Alarm Definitions” per camera, but we can use more depending on what we want to show in Milestone XProtect Smart Client.

If, for example, we have 2 cameras with same DAVANTIS rule name (Intruder) at the DAVANTIS system, we could define just one Analytics Event (called Intruder) at XProtect and then 2 Alarm Definitions (each for 1 camera), using the same Analytics Event (Intruder).

But if we had 2 cameras with different DAVANTIS rule names (IntruderCam1 and IntruderCam2) we should then define 2 Analytics Events (called IntruderCam1 and IntruderCam2) and 2 Alarm Definitions as described before.

At Milestone XProtect Management client left panel:

- Go to “Alarms” and right click on “Alarm Definitions”.
- Click on “Add New”.
- Set any alarm definition “Name”.
- Select “Analytics Events” as “Triggering event”.
- Set one of the previously created events for the current alarm definition.
- And select as Source the camera related to that event.



Camera names in Milestone XProtect related to DAVANTIS events must be named identically as the camera names defined at the DAVANTIS unit (see “3. Configure DAVANTIS Platform”).

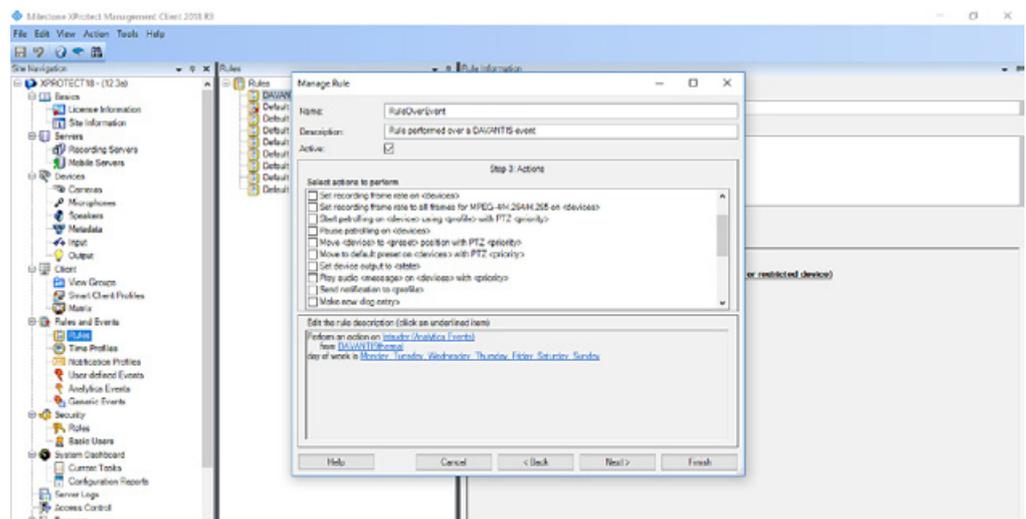
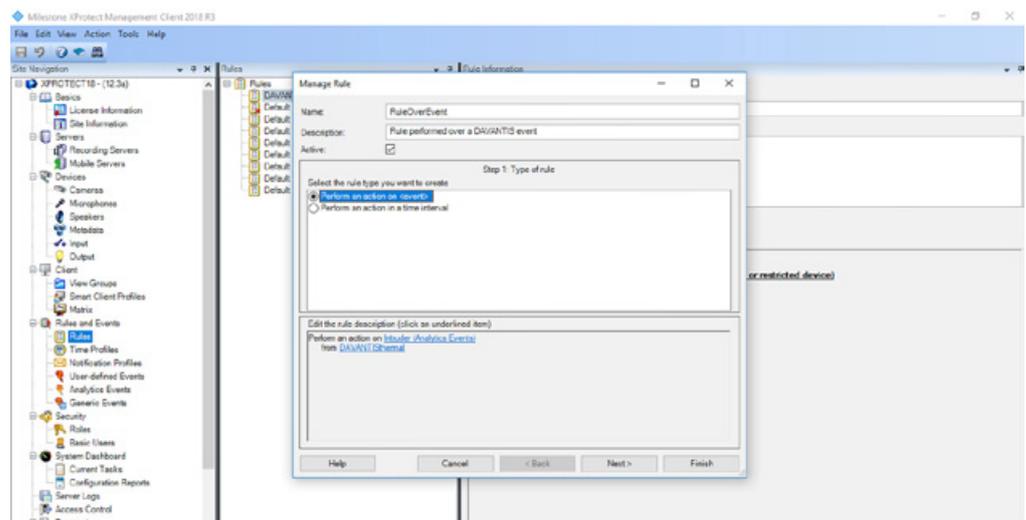
2.5.2. RULES OVER DAVANTIS EVENTS

In order to perform actions over a DAVANTIS detection, XProtect users may add rules related to a DAVANTIS event.

Please notice that the feature “Flexible event rule engine” may not be available in all Milestone products.

To define a rule, at Milestone XProtect Management Client left panel:

- Go to “Rules and Events” and right click on “Rules”.
- Click on “Add Rule”.
- Type a name and a description for the rule.
- Select the event that will be related to the rule and the conditions to apply.
- Select actions to perform.

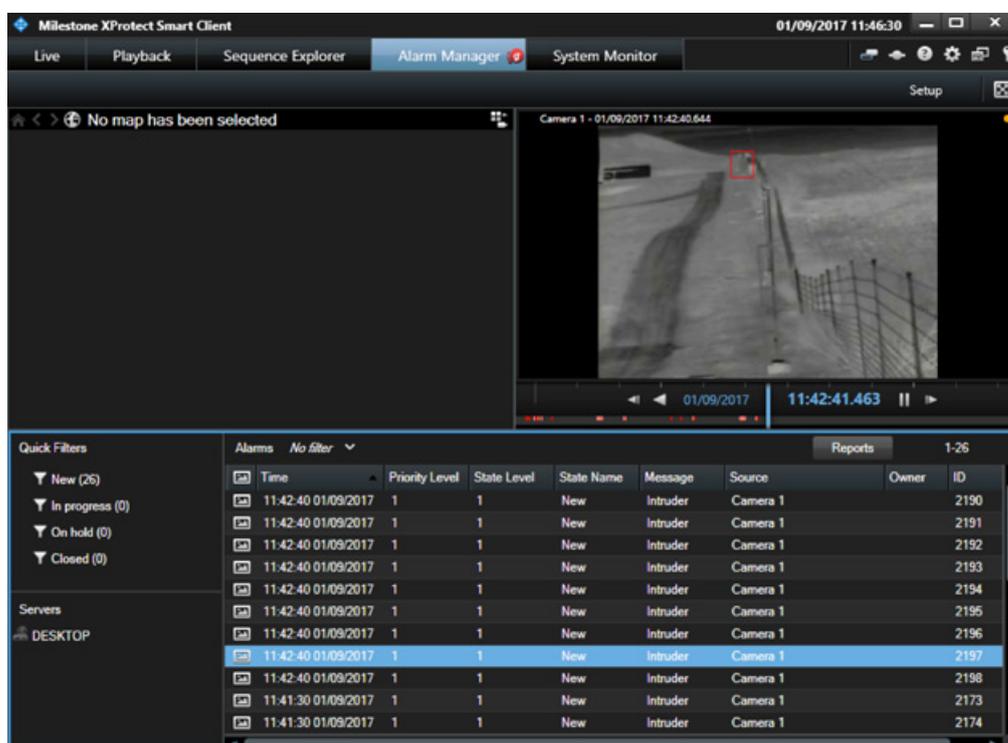


2.6. CONFIGURING XPROTECT SMART CLIENT

Operators will be able to monitor DAVANTIS alarms at the “Alarm manager” at the XProtect Smart Client.

In XProtect products where the “Alarm manager” feature is not enabled, users may configure an “Alarm list” at the Live tab in order to monitor the events and alarms. We can also visualize snapshot previews, camera live views or retrieve video recordings.

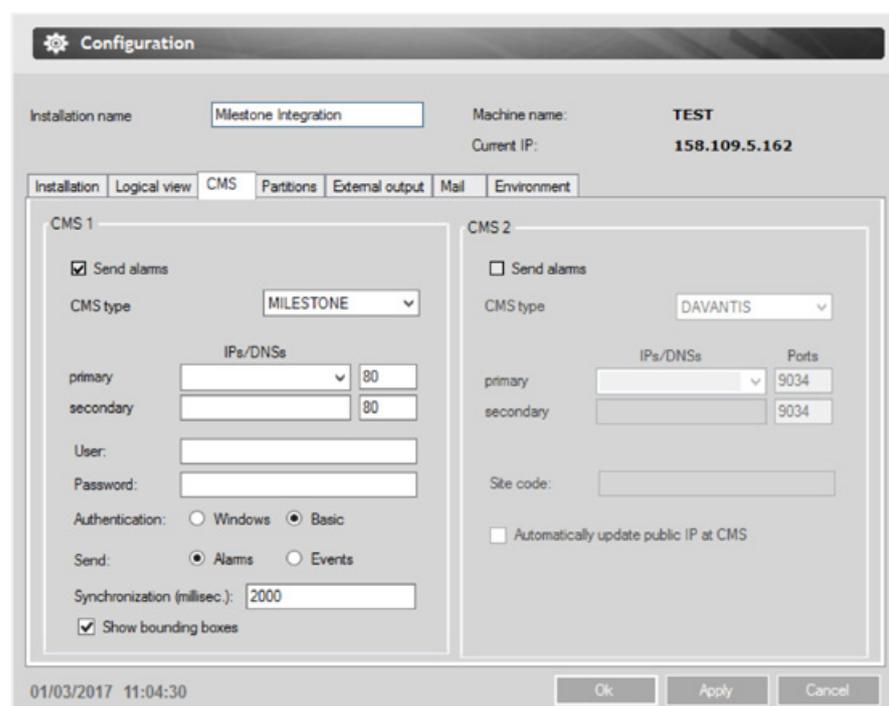
Please notice that, for the Alarm list, the “Message” field will hold the rule name defined in DAVANTIS unit.



3.1. CMS CONFIGURATION

DAVANTIS video analytics units may be configured to send alarms/events to Milestone XProtect. At the master unit, within the DAVANTIS video analytics main screen:

- Press the “Configuration” button.
- Select the “CMS” tab.
- Set the flag “Send alarms” on.
- Choose “MILESTONE” as CMS type.
- Set the IP address and port of the Milestone server (default port: 80).
- Enter User and Password of the Milestone server.
- Milestone allows two types of authentication, as Windows user or as Basic, set as configured in XProtect Management Client.
- Select to send “Alarms” or “Events” as desired (see “2.5. Alarms and events at XProtect”).
- Synchronization sets a time in milliseconds to synchronize bounding boxes with the related alarm. By default, 2000 ms, the bounding box of an intrusion will be drawn 2 seconds in time before the alarm is received.
- If the streams in Milestone VMS are being recorded directly from the DAVANTIS units, we may uncheck “Show bounding boxes” so we don’t show them overlapped.



After setting the configuration, please remember to synchronize the DAVANTIS unit and the Milestone server unit to the same time/date or to the same NTP server.

3.2. ENABLE VIRTUAL ONVIF CAMERA FEATURE

In case we want to receive and record at Milestone XProtect the streams directly from the DAVANTIS units (which will already contain the bounding boxes within the image), we must enable the “Virtual ONVIF Camera Streaming” feature for each camera in section “Cameras”, “Add/Modify” cameras.

