

## **AXIS Perimeter Defender with Milestone VMS**

### **User Manual**

# AXIS Perimeter Defender with Milestone VMS

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# AXIS Perimeter Defender with Milestone VMS

## Introduction

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### Introduction

AXIS Perimeter Defender integrates with XProtect Video Management Systems (VMS) from Milestone, providing operators with immediate and informative feedback on potential security incidents.

The integration between XProtect product family and AXIS Perimeter Defender depends on the XProtect Product that is used:

- For XProtect Corporate and Expert (starting from version 2014), it is possible:
  - To trigger "User Defined" events when AXIS Perimeter Defender generates an alarm.
  - To trigger "Video Analytics" events when AXIS Perimeter Defender generates an alarm.
  - To insert a bookmark in the corresponding video sequence.
  - To display the live metadata generated by AXIS Perimeter Defender on top of the corresponding video stream in Milestone Smart Client.
  - To record the metadata generated by AXIS Perimeter Defender with the corresponding video stream, and to display them together when playing the video sequence in playback mode.
- [integration to come in a future release] For XProtect Enterprise, Professional and Express it is possible:
  - To trigger "Custom Events" when AXIS Perimeter Defender generates an alarm.
  - To display the live metadata generated by AXIS Perimeter Defender on top of the corresponding video stream in Milestone Smart Client.

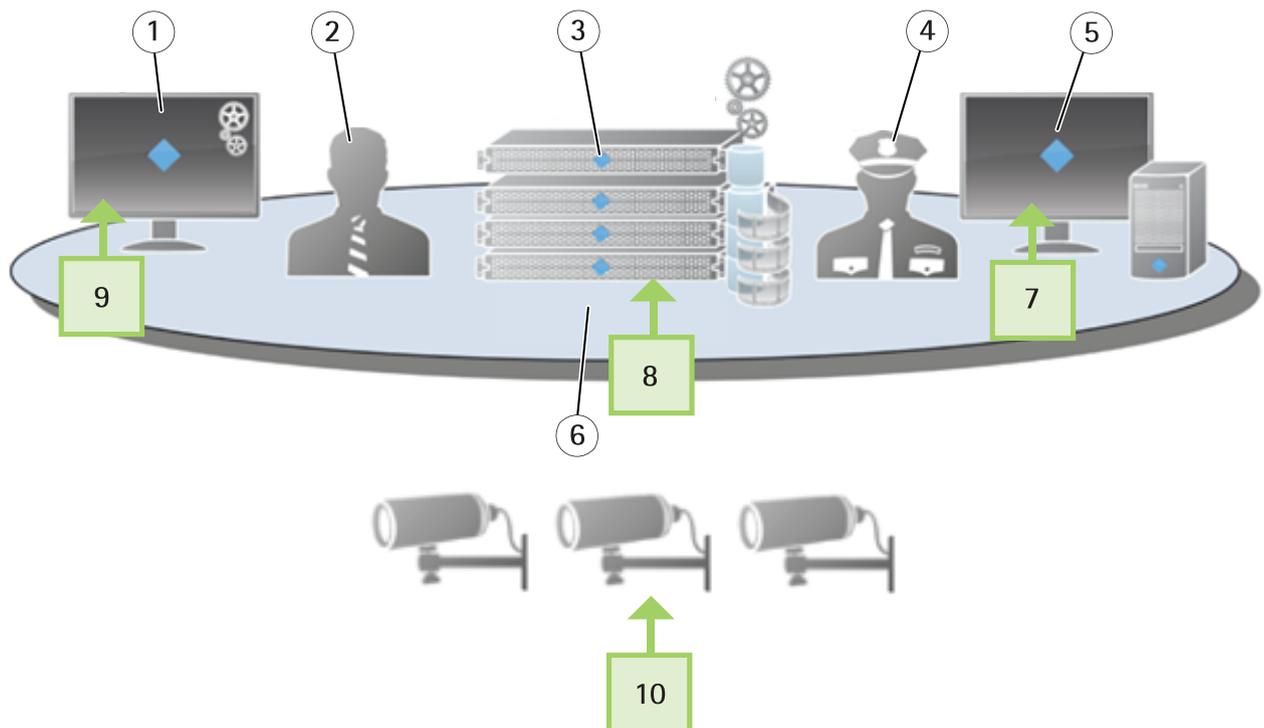
The following sections describe and detail how to configure both XProtect and AXIS Perimeter Defender in order to achieve these two types of integration, for each "family product". Be aware that even inside the same "family" (for example, Enterprise/Professional/Express) there are some differences in the configuration depending on the specific XProtect product that is used (Enterprise or Professional or Express).

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### AXIS Perimeter Defender integration with XProtect Corporate or Expert

The integration between AXIS Perimeter Defender and XProtect is based on a set of software modules running on the XProtect servers. The following picture displays a typical XProtect installation:



- 1 XProtect Corporate Management Client
- 2 Administrator
- 3 XProtect Corporate management server
- 4 Operator
- 5 XProtect Smart Client
- 6 XProtect Corporate recording servers
- 7 MIP Plugins for AXIS Perimeter Defender
- 8 AXIS Perimeter Defender Metadata Bridge
- 9 MIP Plugins for AXIS Perimeter Defender
- 10 Axis cameras running AXIS Perimeter Defender

Depicted in green are the additional software modules that make the integration between AXIS Perimeter Defender and XProtect:

- The "MIP Plugin for AXIS Perimeter Defender" is installed on every PC running either the XProtect Management Client or the XProtect Smart Client.
  - When run by the Management Client, it simplifies and automatizes the configuration of the system and allows to configure the automatic generation of Bookmarks and or User Defined events (that, in turn, can trigger a large set of tasks as answer to an alarm)
  - When run by the Smart Client, it displays the metadata generated by AXIS Perimeter Defender on top of the corresponding video streams, both in live mode and in playback mode
- The "AXIS Perimeter Defender Metadata Bridge" runs as a Windows Service on one XProtect Recording Server (or Management Server) (optionally it can be installed and run on any other server connected by LAN to the Axis cameras). It

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feeds the XProtect Recording Server with the metadata coming from AXIS Perimeter Defender. The XProtect Recording Server records them on disk and makes them available to the Smart Client for live and playback display.

### Prerequisites

The integration pack has the following prerequisites:

- Microsoft .net 4.0 must be available on the PC where the integration pack is installed. If it is not available, it will be automatically installed by the Integration pack installer
- Milestone XProtect Corporate 2014 or Expert 2014 or a later version
- AXIS Perimeter Defender

### Licensing

In order for the XProtect Corporate system to receive and record the metadata, an additional DLK is needed (independently from the number of metadata channels received by the system). This license is a standard DLK license to purchase from Milestone. For example:

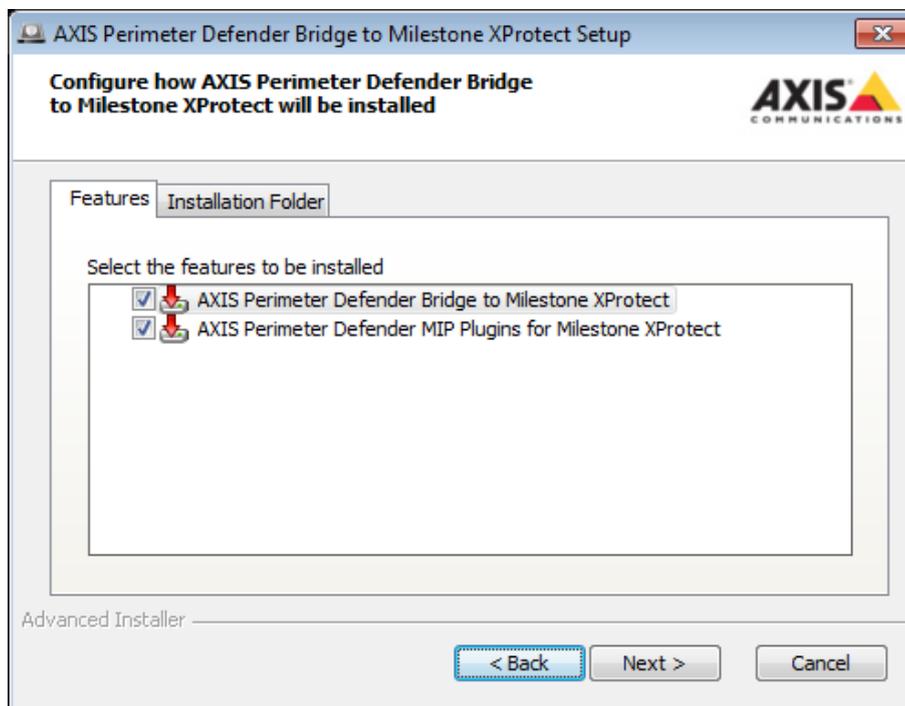
- The system has 50 cameras connected; all of them have AXIS Perimeter Defender installed. The system must record and display the AXIS Perimeter Defender metadata. In this case, the total number of required DLK is 51.
- The system has 50 cameras connected; half of them have AXIS Perimeter Defender installed. The system must record and display the AXIS Perimeter Defender metadata. In this case, the total number of required DLK is 51.
- The system has 50 cameras connected; half of them have AXIS Perimeter Defender installed. The system must receive the alarms triggered by AXIS Perimeter Defender and react on them, but metadata recording and display is not required. In this case, the total number of required DLK is 50.

### Installation

The installer executable ("AXIS Perimeter Defender Milestone XProtect Integration Pack X.Y.Z.W.exe") installs both the AXIS Perimeter Defender Metadata Bridge and the MIP Plugins for AXIS Perimeter Defender. At the installation, a dialog allows the user to choose the component(s) to install:

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The user must run the installer and choose the MIP Plugins for AXIS Perimeter Defender component on every PC where the XProtect Smart Client is installed and where the user wants the metadata display (if metadata display is not a requirement, this installation can be omitted).

The user must also run the installer and choose the MIP Plugins for AXIS Perimeter Defender on every PC where the XProtect Management Client is installed and the user wants to administer (configure) the AXIS Perimeter Defender integration.

Finally, the user must run the installer and choose the "AXIS Perimeter Defender Metadata bridge" on either the XProtect Recording Server, or the XProtect Management Server or any other server directly connected by a good quality network (LAN) to the Axis cameras running AXIS Perimeter Defender.

### Software installation on the host running the Management Client and/or the Smart Client

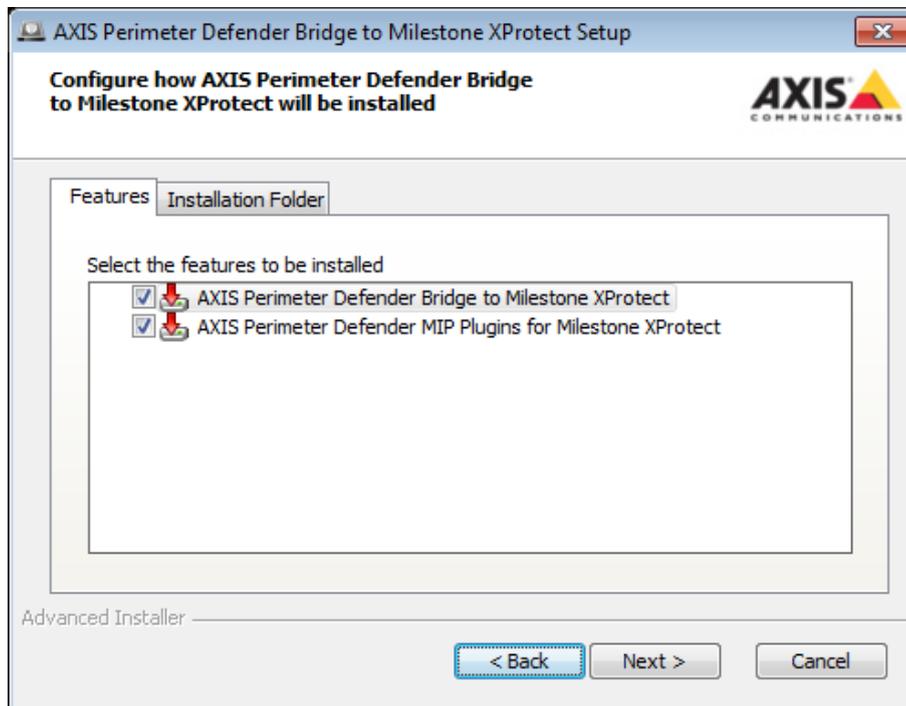
#### Important

- Before installing the MIP Plugin for the XProtect Management Client, the Management Client must be already installed on the target host.
  - In addition, before installing the MIP Plugin for the XProtect Smart Client, the Smart Client must be already installed on the target host.
1. As administrator, execute the "AXIS Perimeter Defender Milestone XProtect Integration Pack X.Y.Z.W.exe" installer.
  2. Click **Next**.
  3. Accept the EULA and click **Next**.
  4. If you plan to run the Metadata Bridge on another host, untick the **AXIS Perimeter Defender Metadata bridge** component. In any case, let the **MIP Plugins for AXIS Perimeter Defender** ticked. Click **Next**.

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5. Click Install.
6. When the installation has finished, click Finish.

### Software installation on the host running the XProtect Recording Server

#### Important

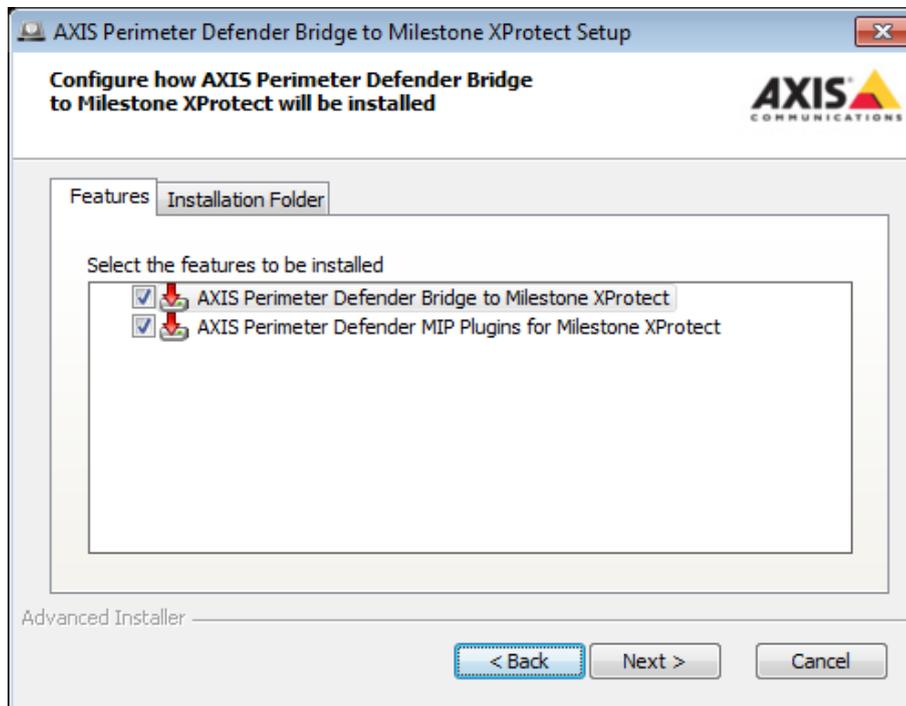
Before installing the AXIS Perimeter Defender Metadata Bridge, the XProtect System must be already installed and running on the same host or on a host connected to the Metadata Bridge one by a LAN.

1. As administrator, execute the "AXIS Perimeter Defender Milestone XProtect Integration Pack X.Y.Z.W.exe" installer.
2. Click Next.
3. Accept the EULA and click Next.
4. If you have a Management Client installed on this host and you plan to configure the system with it, tick the MIP Plugins for AXIS Perimeter Defender component too. In any case, the AXIS Perimeter Defender Metadata Bridge should be ticked.

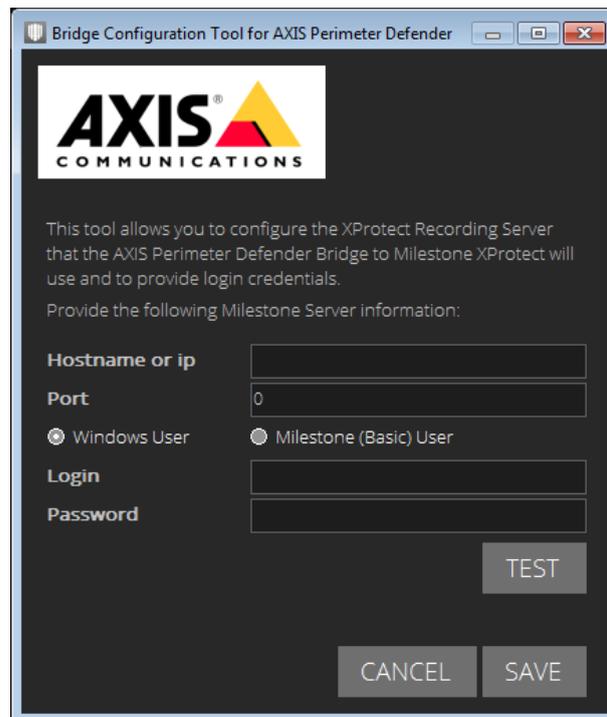
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5. Click Install.
6. When the installation has finished, click Finish.
7. The AXIS Perimeter Defender Metadata Bridge Configuration opens:



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8. **Hostname or ip address** field must be filled with the DNS name or ip address of the XProtect Corporate server. 127.0.0.1 can be used if the Corporate server is installed on the same host.
9. **Port** is the port configured in the XProtect Server for SDK connections. If this value has not been customized in your installation, the default value of 0 (that means "use the default value") should be fine, otherwise use the custom port value you set up
10. Choose if the login uses an existing **Windows user** or a **Milestone user** defined in the XProtect System 11.
11. Then fill the **login** field. For a Windows user, it is necessary to prefix the login name with user domain, as in "domain\username". For a Milestone User, only the username should be used
12. Then fill the **password** field. If you are using a Windows User, do not forget to provide the user password in this field
13. Click **Test** to check if the connection succeeds. If not, fix the problem by providing the correct information. If yes, you can click **Save**.
14. The provided information will allow the AXIS Perimeter Defender Metadata Bridge to connect to the XProtect Server.

### Configuration

Through the MIP Plugins for AXIS Perimeter Defender running in the XProtect Management Client it is possible to configure different aspects of the system:

- It is possible to scan the list of cameras defined within XProtect and automatically select those where AXIS Perimeter Defender is installed
- Then the plugin automatically configures a Metadata Source providing a metadata channel for each Axis camera with AXIS Perimeter Defender installed. The Metadata Source is implemented and executed by the "AXIS Perimeter Defender Metadata Bridge" and must be added to the XProtect System. It is possible to increase the number of video channels provided by the Metadata Source to plan future extensions of the system. The unused channels should be disabled once the metadata source has been added (see the following sections for details)
- The plugin allows the user to deactivate the automatic generation of XProtect Alarms when a AXIS Perimeter Defender triggers an alarm (the alarm generation is activated by default)
- The plugin allows the user to deactivate the automatic generation of a XProtect bookmarks when AXIS Perimeter Defender triggers an alarm (the bookmark generation is activated by default)
- The plugin allows the user to automatically generate two User Defined events (one corresponding to the start of the alarm, and one to the end) per alarm generated by AXIS Perimeter Defender. The user can then delete the unused or redundant User Defined events.

The following sections explain systematically how to configure a system and details the different available options.

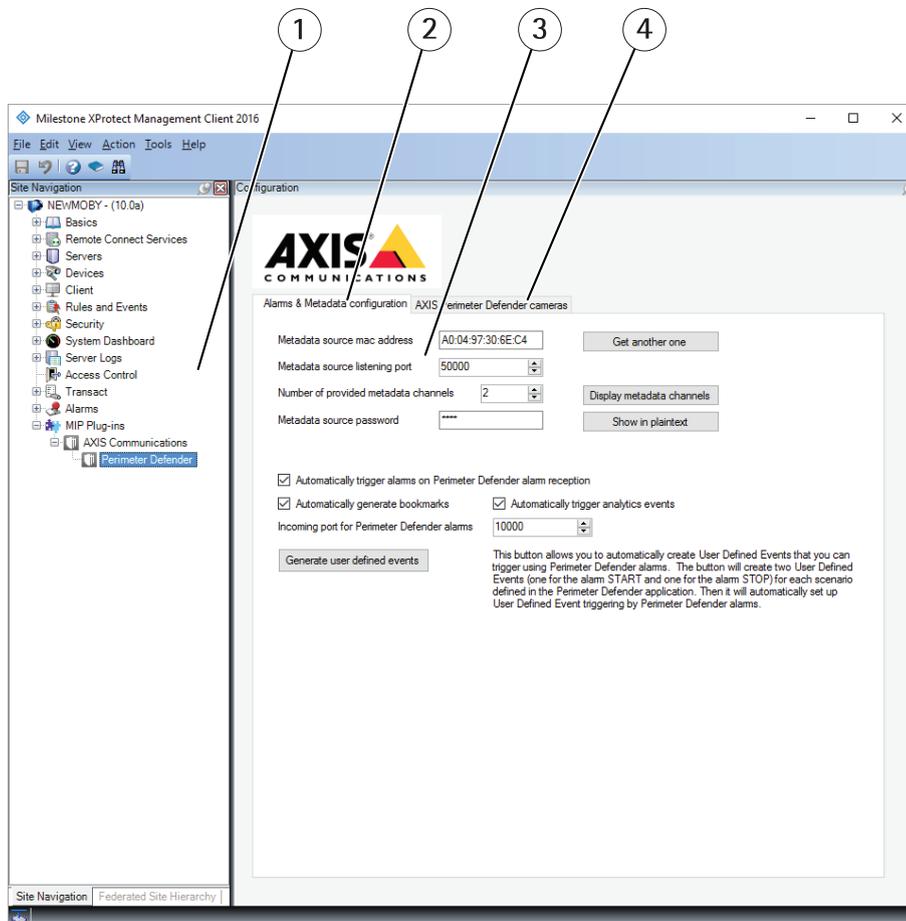
### Alarms, events and bookmarks configuration through the Management Client Plugin

#### Important

Before configuring the software, both the MIP Plugin for the Management Client and the AXIS Perimeter Defender Metadata Bridge must be installed. In addition, the Metadata Bridge must also be configured to be able to access the XProtect System (as described in the previous section).

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- 1 Site navigation
- 2 Metadata configuration tab
- 3 Metadata parameters
- 4 Camera list

To configure the software, follow these steps:

1. Open the Management client, and add to the XProtect system all the cameras you need.
2. Click MIP Plugins, Axis Communication, Perimeter Defender in the site navigation and you will get the configuration screen above.
3. Click on the **Alarms & Metadata configuration** tab.
4. Then configure the parameters of the metadata source:
  - The mac address must be unique (i.e. do not copy the mac address of an existing device like a network camera). The default (random) proposed value should just be fine. You can get new (random) mac addresses by clicking **Get another one**.

### Important

The Metadata source MAC address is tied to the DLK license of Milestone. If you change it after having added the metadata source to XProtect, you must re-associate the DLK to the new mac address.

- The Metadata source listening port is where the metadata source will listen for incoming connections from XProtect. The metadata source logically behaves like a physical device (like a multi-channel encoder) but

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distributes metadata streams instead of video streams. This listening port is the equivalent to the port 80 of a network device. The default value of 50000 should be fine, unless another application already uses this port on the host. This can be verified by using the windows command "netstat -an" (on the host) and looking if there is a line with "LISTENING" and "50000". If yes, choose another port.

- The **Number of provided metadata channels** will be automatically set by the **Refresh camera list** to the number of Axis cameras/encoders found in the Milestone system that have AXIS Perimeter Defender installed. If you want more metadata channels (for example because you know you will add more Axis cameras with AXIS Perimeter Defender in the future), you can increase this number here.

### Important

If you already added the metadata source to the Milestone system, in order to increase or decrease the number of video channels it is necessary to remove it and add it again.

- The Management Client will request the metadata source password when adding the metadata source to the system.

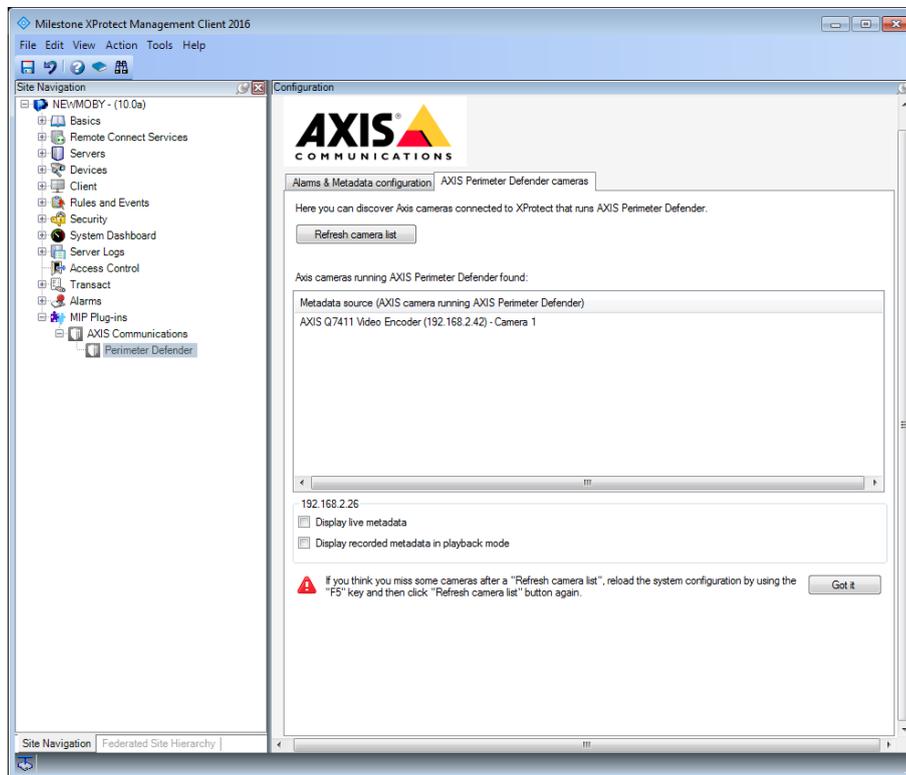
### Important

If you already added the metadata source to the Milestone system and you change the password, XProtect will not be able to retrieve the metadata anymore. In this case, it is necessary to update the password value in the metadata source settings.

5. If you want to automatically trigger an XProtect alarm when AXIS Perimeter Defender generates one, tick the **Automatically generate alarms on AXIS Perimeter Defender alarm reception** option.
6. If you want to automatically insert in the corresponding XProtect video stream a bookmark, tick the **Automatically generate bookmarks** option.
7. If you want to automatically trigger an XProtect Video Analytics Event when AXIS Perimeter Defender generates an alarm, tick the **Automatically generate analytics events** option.
8. If you want to change the listening port where the incoming alarms are received (for example, because the default port 10000 is already taken on the host running the AXIS Perimeter Defender Metadata bridge), change the value of the **Incoming port for AXIS Perimeter Defender alarms** option.
9. Do not forget to save the configuration changes.
10. If you want the AXIS Perimeter Defender alarms to trigger XProtect User Defined Events, you need to define these events. You can use the **Generate user defined events** to automatically generate them. The button will parse the scenarios defined in each Axis-AXIS Perimeter Defender cameras and generate a couple of User Defined Events (one for the start, the other for the stop of the scenario) that Metadata Bridge will trigger when AXIS Perimeter Defender generates the corresponding alarm. For example, by clicking the button on a system with 2 AXIS Perimeter Defender cameras each one having 1 scenario ("Intrusion" for one of them, "Zone-crossing" for the second), the configuration plugin generates these XProtect User Defined Events:
11. Save the configuration.
12. Click on the **Perimeter Defender cameras** tab to open the camera list.

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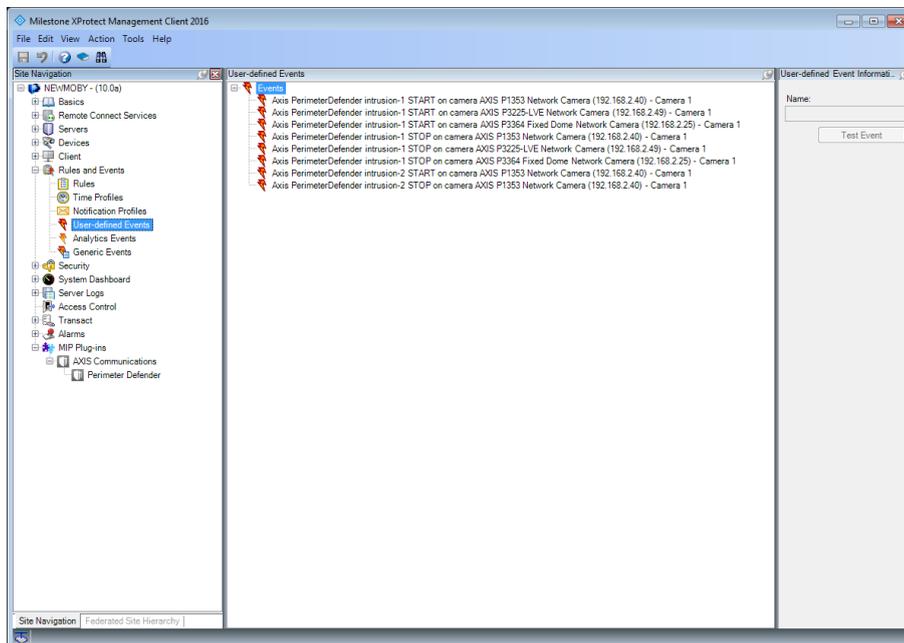
13. The Refresh camera list looks for Axis cameras/encoders added to the XProtect system and, if they have AXIS Perimeter Defender installed, automatically configures them to be able to retrieve the metadata and the alarms and adds them to the Axis cameras running Perimeter Defender widget.
14. This List with metadata streams lists the cameras that have been found in the Corporate system and that fulfil these requirements:
  - Are Axis cameras
  - AXIS Perimeter Defender is installed (but does not need to be running) on the camera.

### **NOTICE**

Sometime when new cameras just has been added, these last ones are not found by the MIP Plugin. In this case, just refresh the Management client configuration by using the F5 key and then click Refresh camera list again.

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15. You can retrieve the User Defined Events by clicking on Rules and Events, User-defined Events:

16. If you are not interested in all of them, for example, if you are not interested in the "STOP" User-defined events, simply remove the not wanted ones. The Metadata Bridge does not find them and hence does not generate them.

### Important

- Do not rename the User Defined events, otherwise the AXIS Perimeter Defender Metadata Bridge will not find them and will not be able to trigger them.
- If you rename a camera, either you rename the corresponding User Defined Event accordingly or you remove the old one and create a new one by clicking on the Generate User Defined Events automatically.

### Note

At this stage of the configuration process, if you activated the alarm, events or bookmarks generation, you should be able to receive them in XProtect without further steps. If you are not interested in metadata display and recording, you can stop here and you will not need the DLK license that is necessary to add the metadata source to Milestone. If you want to have the live and/or recorded metadata too, continue the configuration as explained in *Metadata configuration through the Management Client Plugin on page 15*.

### How to use Analytics Events to trigger further actions

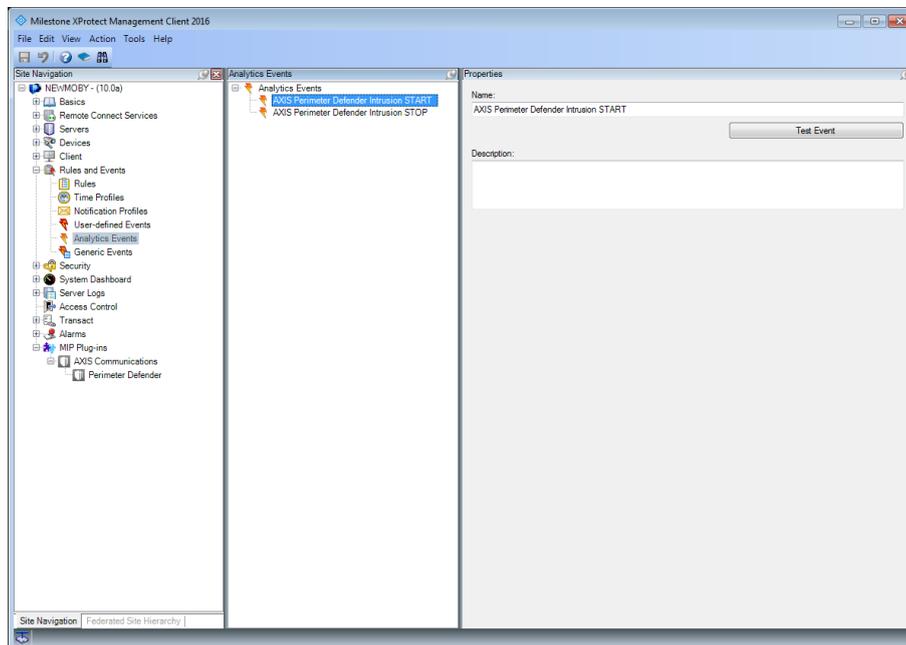
Analytics Events can be used to trigger an Alarm in the XProtect system. However, in order to be able to choose an Analytics Event as a trigger for an alarm, the Analytics Event must be defined in the Management Client. If not defined, the Analytics Event will still be triggered if the option is ticked, and as such, the Event Server and the Smart Client will receive them, but it will not be possible to use it to trigger a further Alarm.

To define an Analytics Event, proceed this way:

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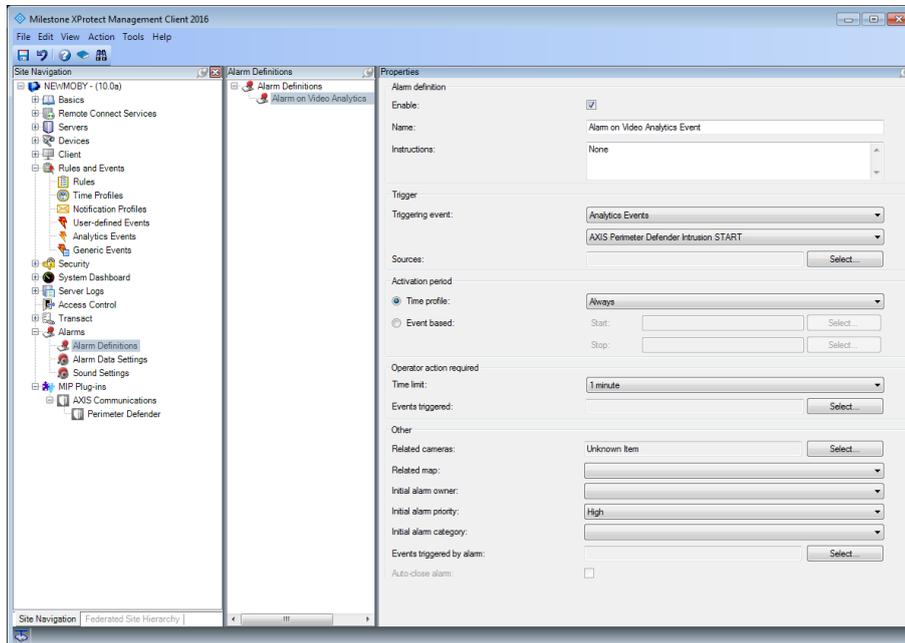


- Click on **Rules and Events** in the left pane.
- Click on **Analytics Events**.
- Right-click on **Analytics Events** in the central pane and click on **Add New...**
- Give to the Analytics Event a name following the pattern "AXIS Perimeter Defender ALERT\_TYPE START\_STOP", where ALERT\_TYPE is one of the following values: "Intrusion", "Loitering", "ZoneCrossing", "Conditional" and START\_STOP is one of the following values: "START" or "STOP". For example, if you want to trigger a rule when the Analytics Event associated with the start of an intrusion is received, name the Analytics Event "AXIS Perimeter Defender Intrusion START".
- If you want, add a description to the Analytics Event.
- Do not forget to save the configuration.

Now the Analytics Event can be used to trigger an Alarm, as displayed in the next image. It is also further to specify exactly which video camera must generate the Analytics Event for the corresponding Alarm to be triggered, thus allowing to trigger different Alarms for different cameras.

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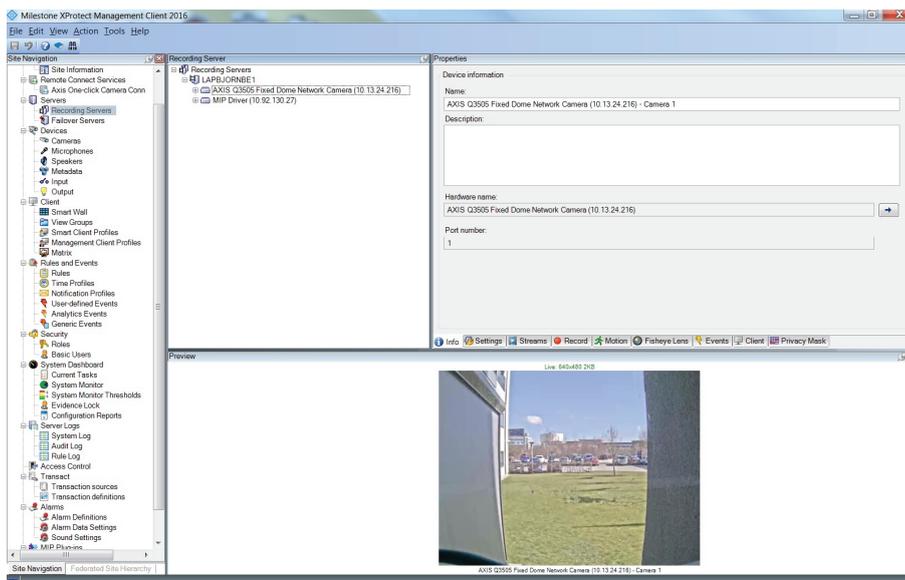


See the Milestone Documentation for further details on how to define an Alarm.

## Metadata configuration through the Management Client Plugin

### Important

Before being able to add the metadata source to the XProtect System, the AXIS Perimeter Defender metadata bridge must be fully installed and configured as described in the previous section (i.e. by providing the XProtect login credentials and IP address):

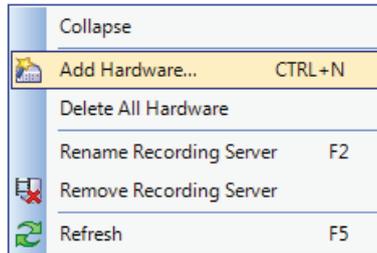


1. In the Management Client, click on Servers, Recording Servers.
2. Select the Server and right-click on it, choose Add hardware.

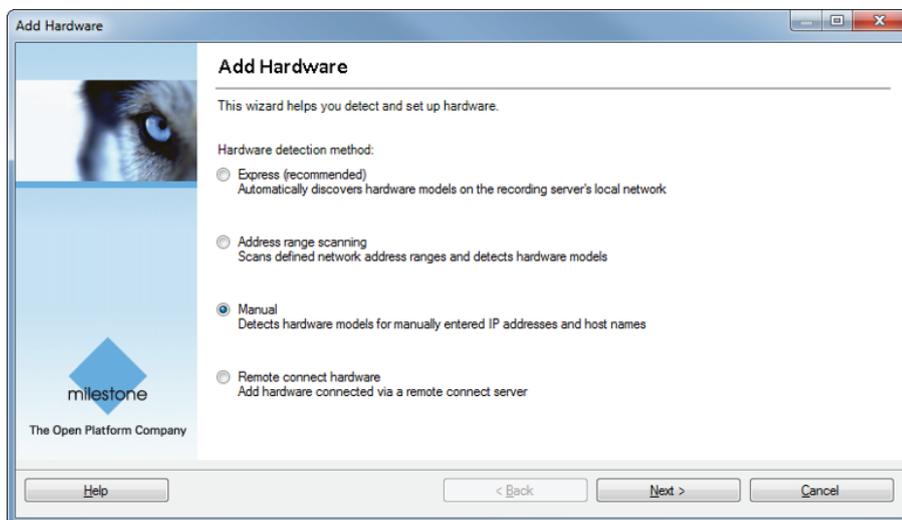
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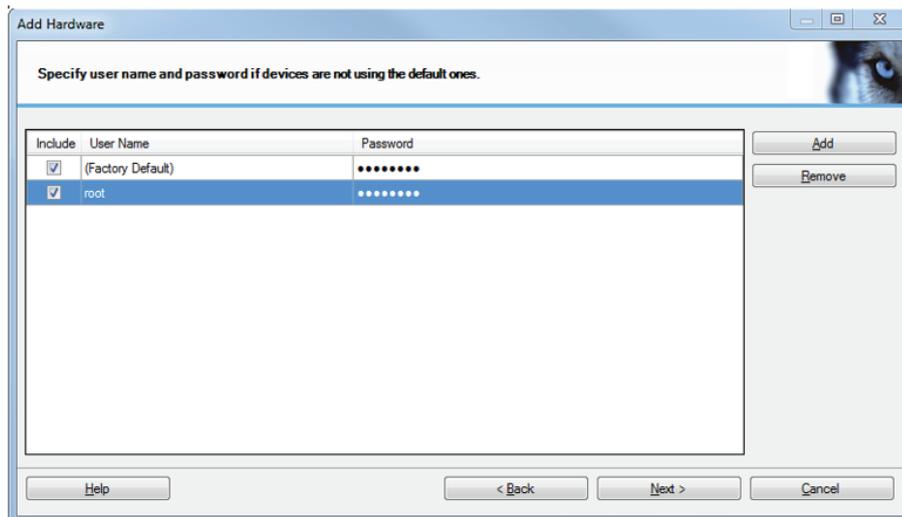
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3. Choose Manual and click Next.



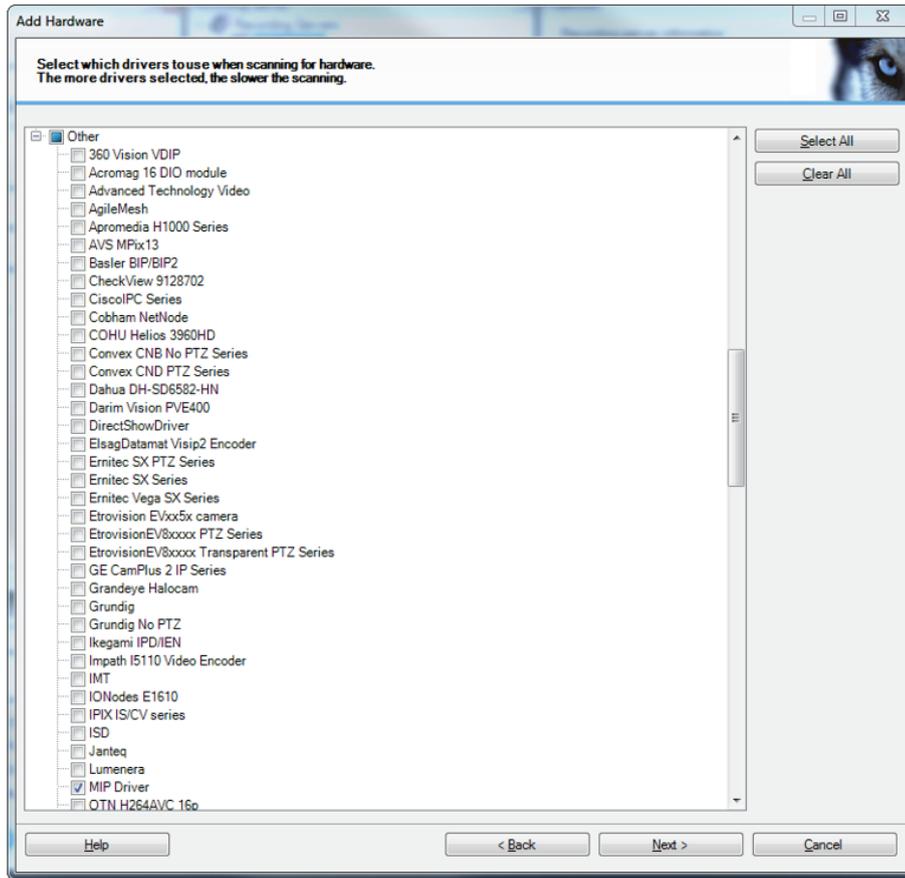
4. Add a new couple of login/password using "root" as login and the password you set for the Metadata source, then click Next.



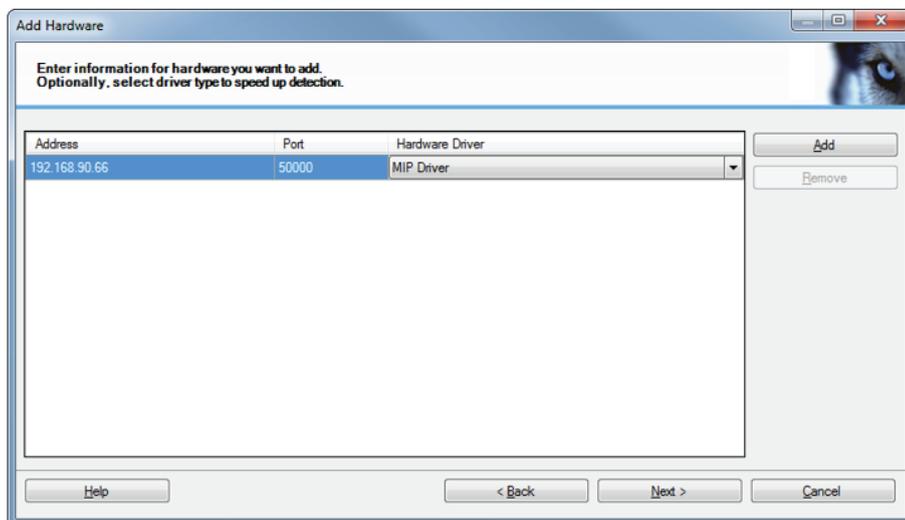
5. Then select Other, MIP Driver as device type and click Next:

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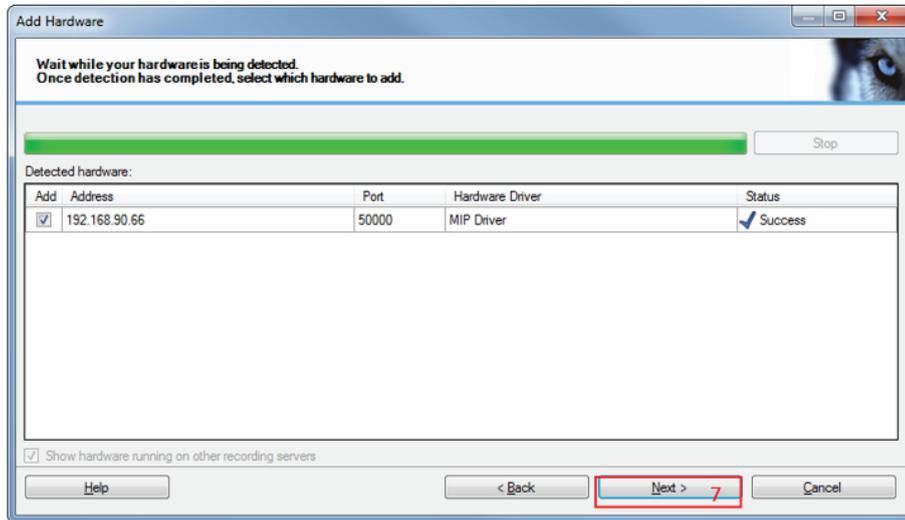
6. Enter the IP address of the host where the AXIS Perimeter Defender Metadata Bridge is installed. Use the public external IP address of the host, even if it is installed locally, as 127.0.0.1 will not work. You can use "netstat -an" and look to which IP address is associated to the listening socket open on port TCP/50000 (or the port that has been chosen for the metadata source). For example, in the following image the address to use is 192.168.90.66
7. Choose the MIP Driver Hardware Driver, because "(Auto-Detect)" will not work. Click on Next.



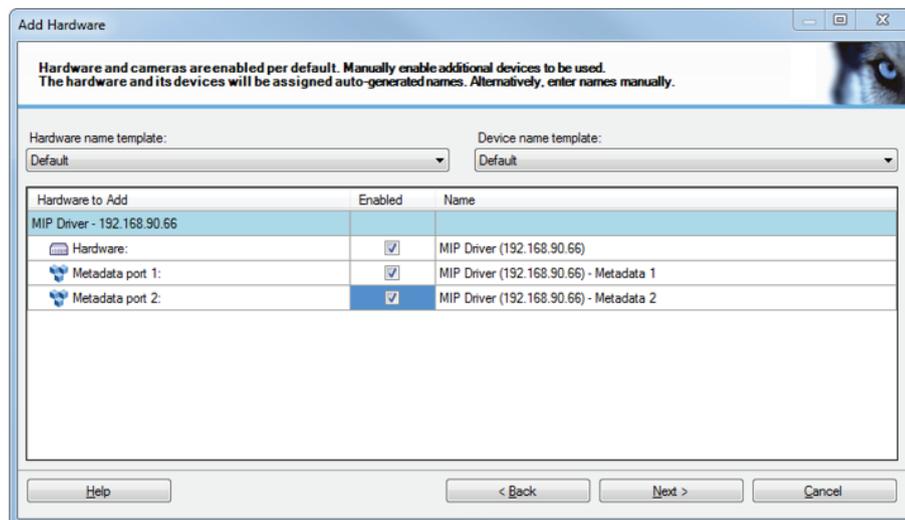
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- The metadata source will be detected and accepted by XProtect. Click Next again.



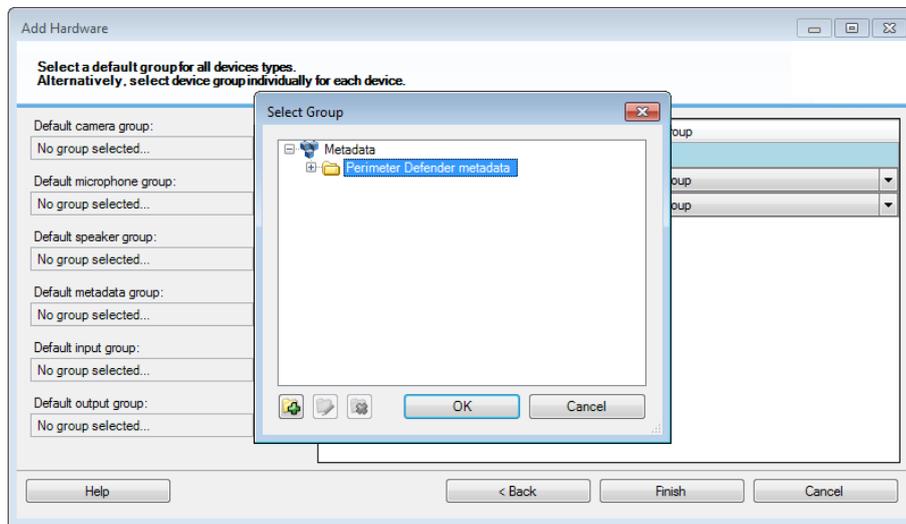
- Enable (tick) the metadata channels as the Axis cameras running AXIS Perimeter Defender that will send metadata to the system. Usually this means all the metadata channels available on the source, except if you increased the number of channels manually to prepare future extensions. In this case, we recommend ticking only the effectively used channels. For example, the following image shows how to enable channels provided by the metadata source. Then click Next.



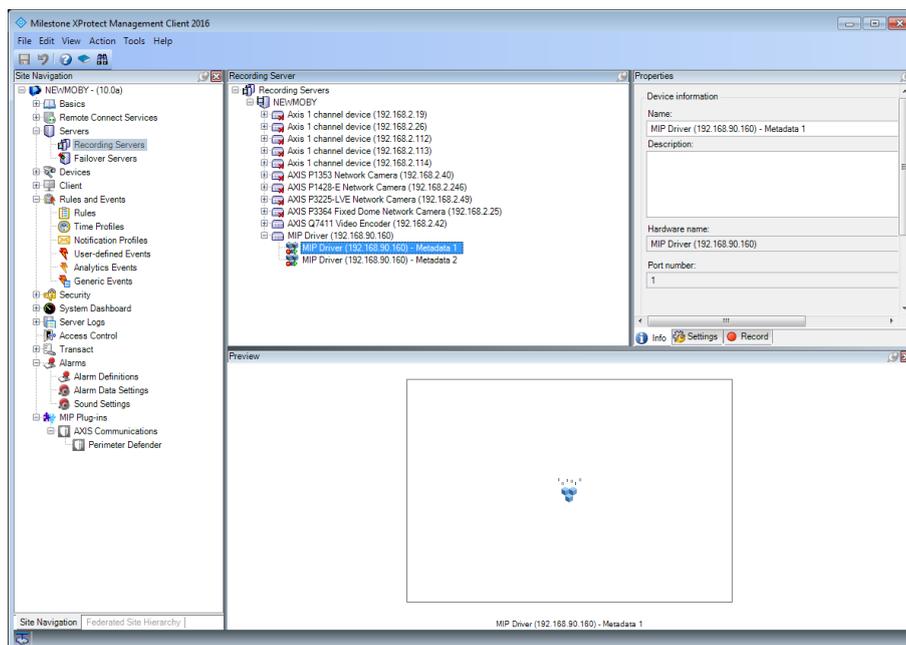
- Choose a group (or create a new one) for the Default metadata group, then click Finish:

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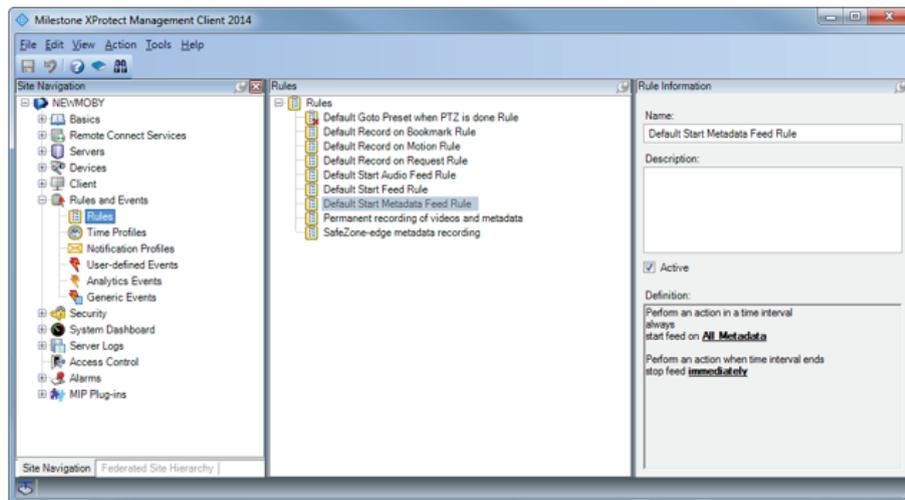
11. Select the newly added Metadata source "MIP Driver (192.168.90.66)" and check that XProtect is correctly retrieving the metadata from the source by looking at the "1/0" animation in the "stream" windows (if XProtect is retrieving metadata from the source, a set of "1/0" comes out from the central cubes.):



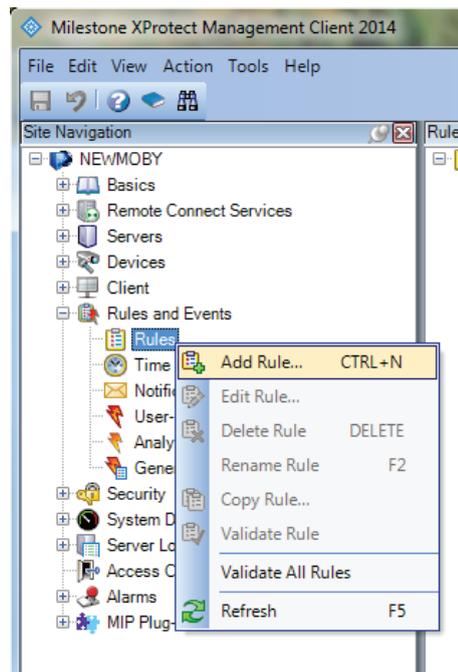
12. If you don't see any "1/0" near the central cube, there is a problem with the metadata retrieval, probably due to the lack of a default rule:
  - Check that you have a Default Start Metadata Feed Rule in the Rules and Events section, and that the rule looks like in the following image:

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- If the rule is missing, you must define it, proceed this way:
- In the Rules and Events section, right click on the Rules item and select Add Rule.



- In the windows that opens, choose a meaningful name for the rule, than select Perform an action in a time interval and click Next >.

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Manage Rule

Name: Start Metadata Feed Rule

Description:

Active:

Step 1: Type of rule

Select the rule type you want to create

Perform an action on <event>

Perform an action in a time interval

Edit the rule description (click an underlined item)

Perform an action in a time interval

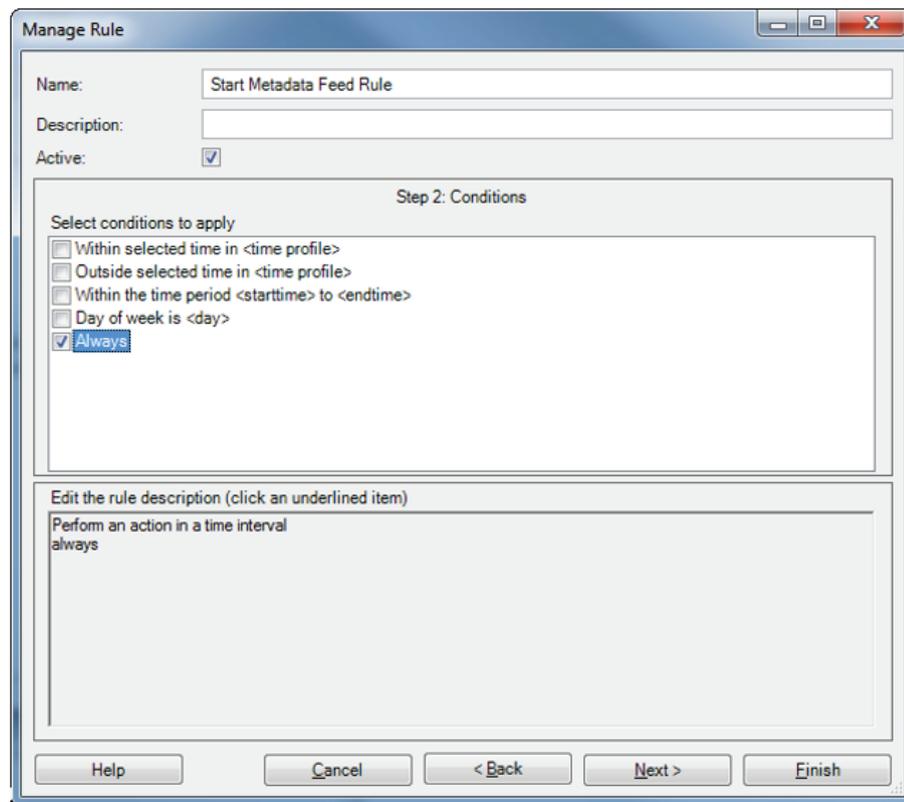
Help Cancel < Back Next > Finish

- Choose Always and click on Next >.

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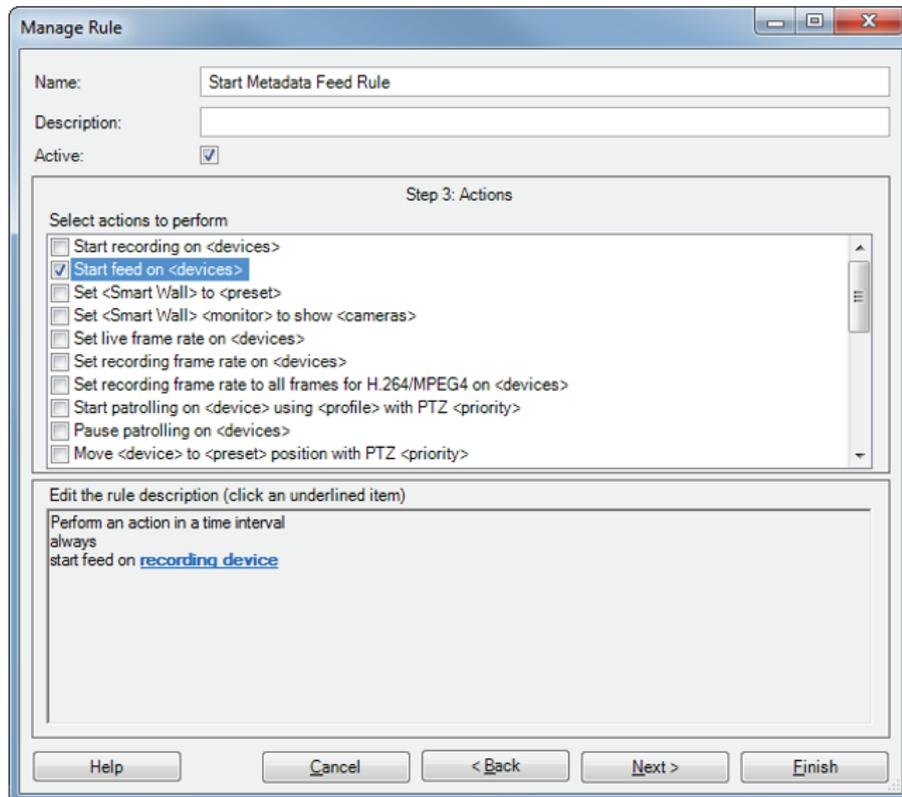


- Tick Start feed on <device>, then click on recording devices.

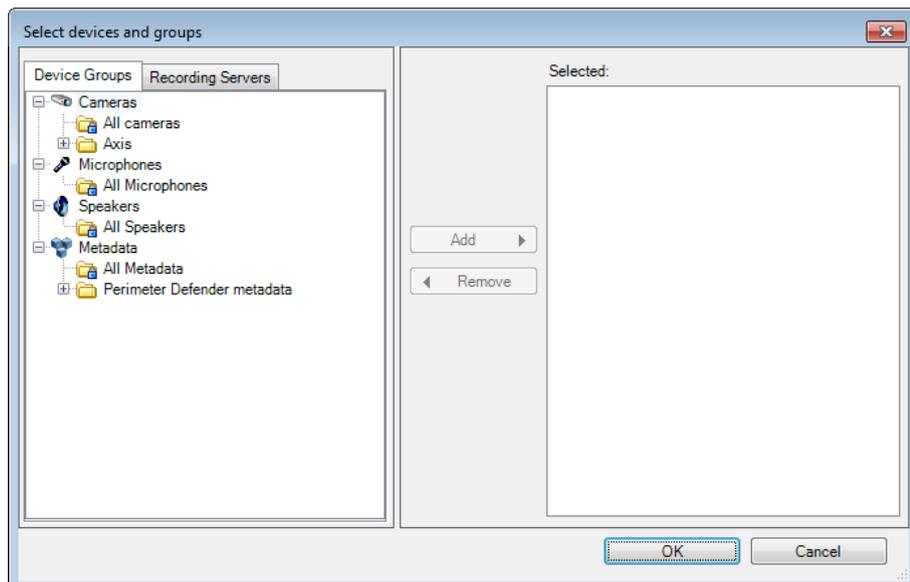
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- Select All Metadata (or alternatively select a sub-set of the metadata input devices, according to your needs) and then click on Add and on OK. Then click on Next > in the "Manage Rule" window.

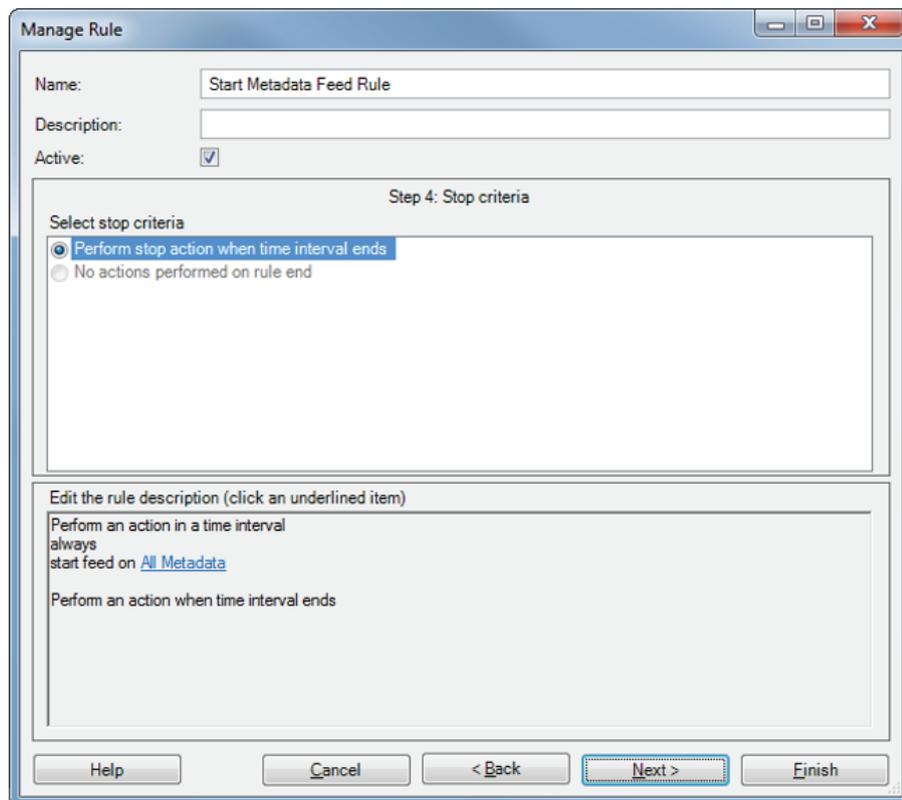


- Select Perform stop action when time interval ends and click on Next >.

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- Click on **Finish** in the final window.

### Important

If you need to rename the metadata channels, you **MUST** respect this basic rule: the last number in the name, separated by a whitespace from the previous word, is equal to the channel number. So you can rename the first channel to, for example "Channel 1" or to "Metadata from MIP driver - 1" but not to "Channel 1 of metadata" or "First metadata channel". Breaking this rule will prevent the Smart Client MIP Plugin from being able to correctly display the metadata.

At the end of these steps, the XProtect system is correctly retrieving the metadata from AXIS Perimeter Defender and it is able to display them in live mode on top of the corresponding video stream. However, XProtect does not record the metadata, and hence the metadata cannot be played back when replaying a recorded sequence. In order to record them, you have to add a special rule in the management client.

### Metadata recording activation

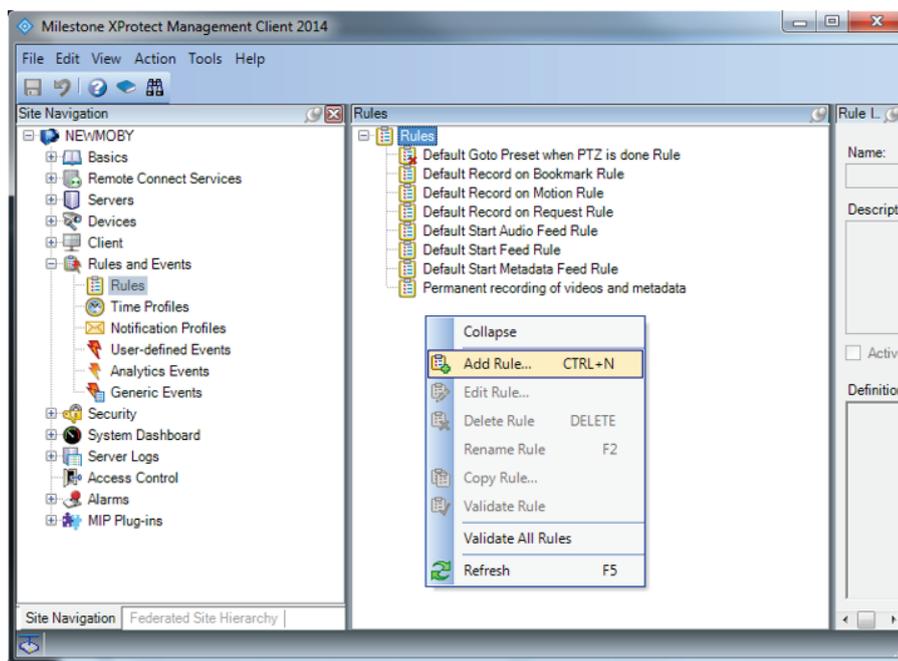
To activate the metadata recording, you have to define a rule in the XProtect System.

1. Open the Management Client.
2. Click on **Rules and Events**, and then on **Rules**, then right-click on the "Rules" window:

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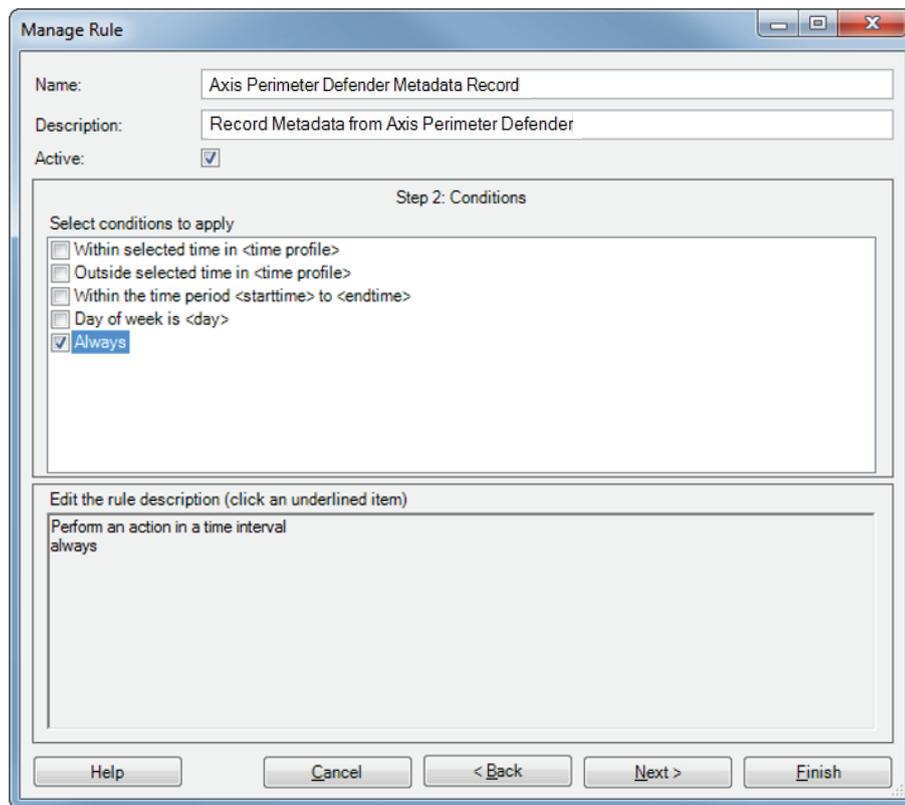


3. Choose Add Rule.
4. Choose a meaningful name and description for the new rule. Then choose Perform an action in a time interval and choose Next.
5. Tick Always and click Next.

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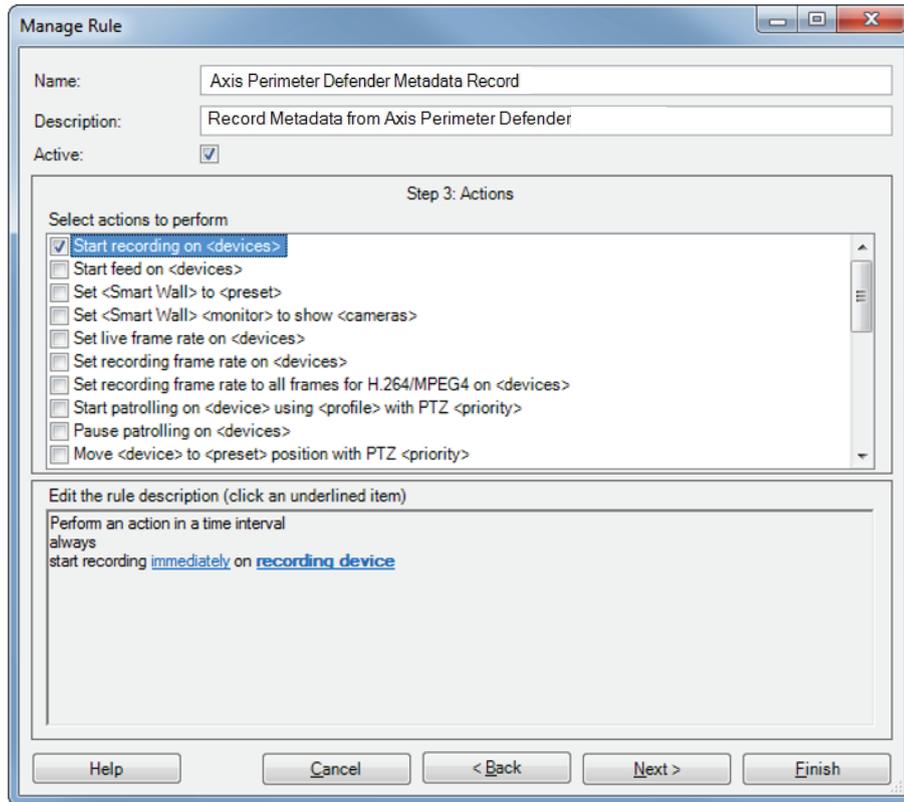
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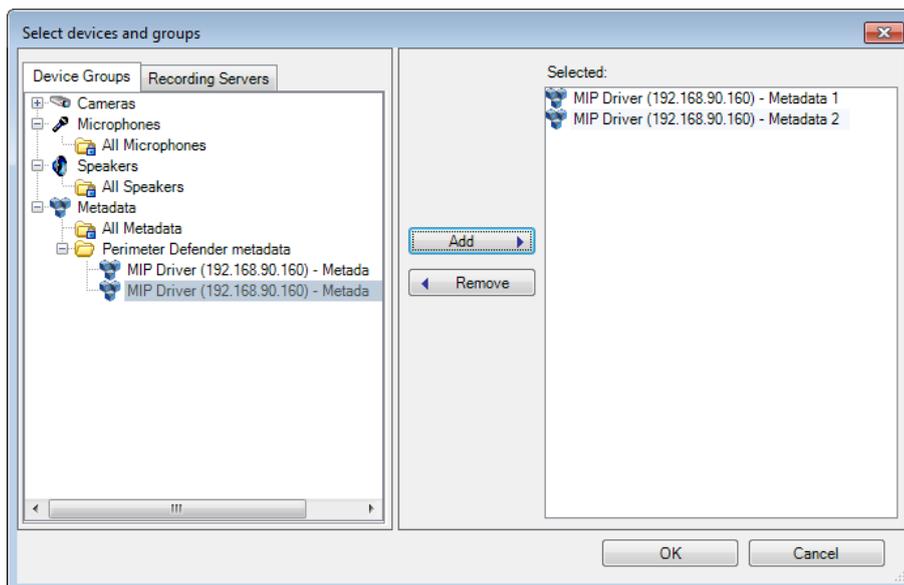
6. Tick Start recording on <devices>, then click on recording device.

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7. Select all the metadata channels and move them to the right panel, into Selected by clicking Add . Then click OK:

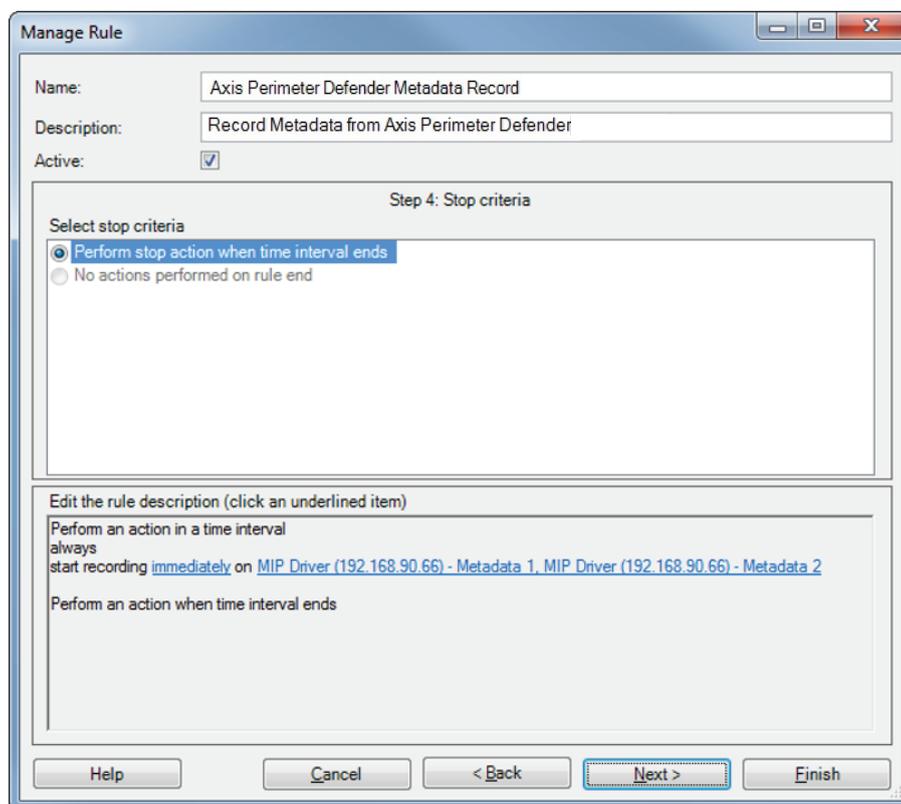


8. In the manage rule window click Next.
9. Select Perform stop action when time interval ends and click Next:

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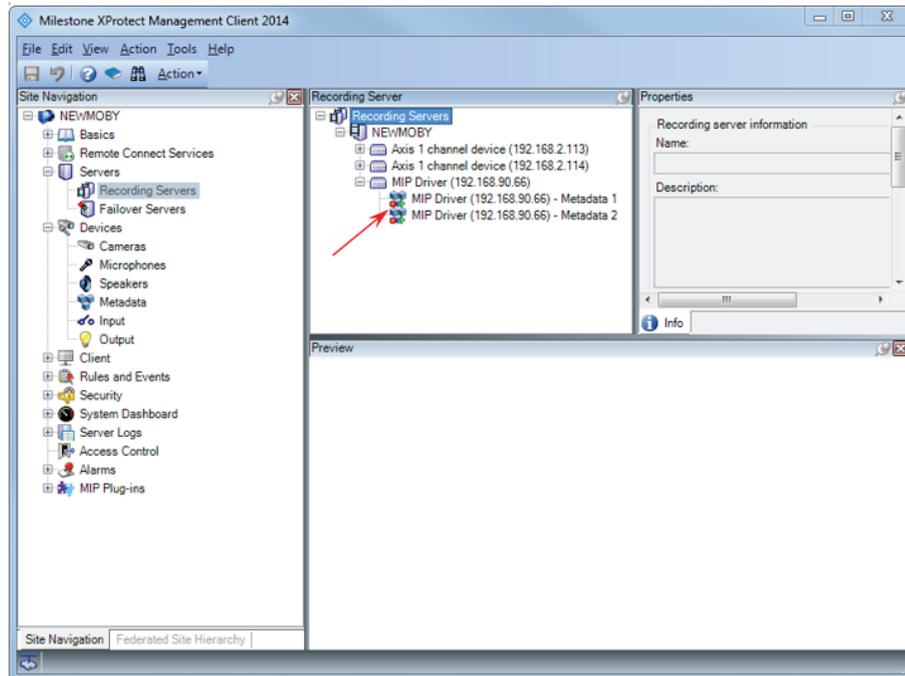
10. Click Finish.

11. To check that the metadata are correctly recorded, go to **Servers, Recording Servers**, expand your recording server, then expand the MIP Driver and check that the icon near the MIP Driver channels has a red square:

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You might want to further tune this rule to, for example, only record the metadata when an event occurs. This is possible, please consult the XProtect Documentation on how to define and customize rules.

### Important

In order to display the metadata in playback mode, the corresponding video stream must be recorded too. The default setting to record video streams in Corporate is **on motion detection**. That means that if there is not enough motion to trigger the video stream recording, even if the metadata recording is **always on** it will not be possible to play it back.

## Operating the Smart Client

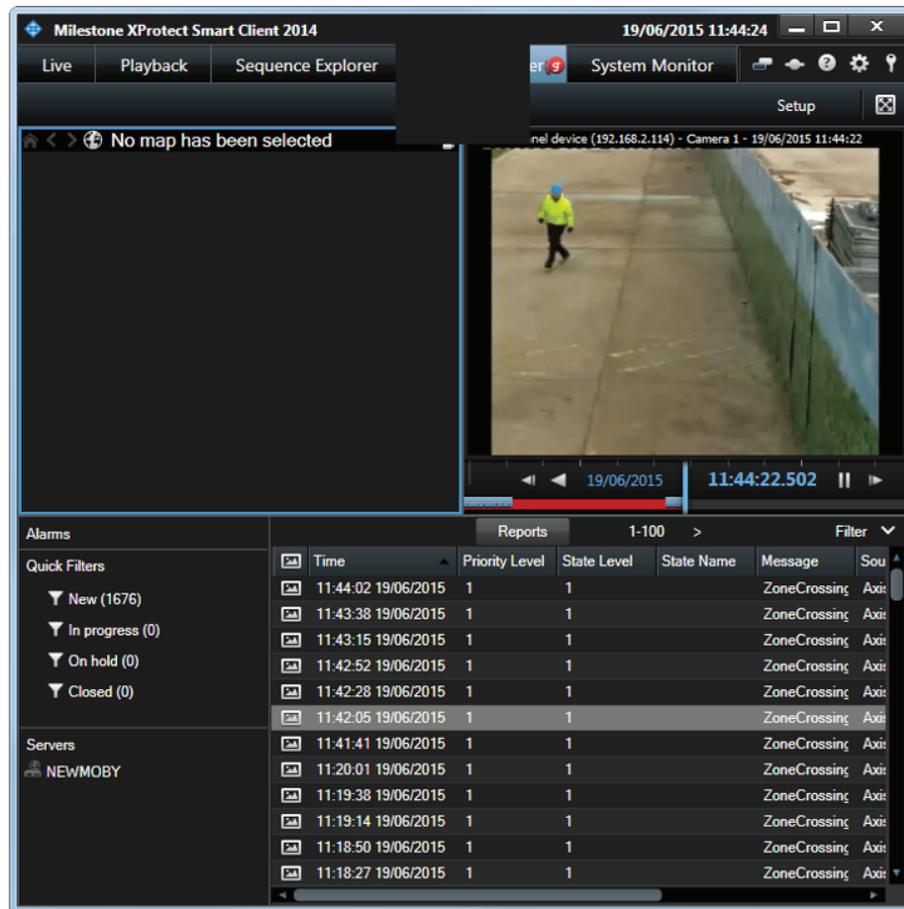
This section describes how to receive and use in the Smart Client the metadata, the alarms, the user defined events and the bookmarks. For a much more detailed description of the Smart Client functionalities, refer to the Milestone documentation.

### Alarms

Alarms are received in the Smart Client "Alarm Management" section:

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By clicking on one of the alarm in the list, the corresponding video sequence is displayed in the video player.

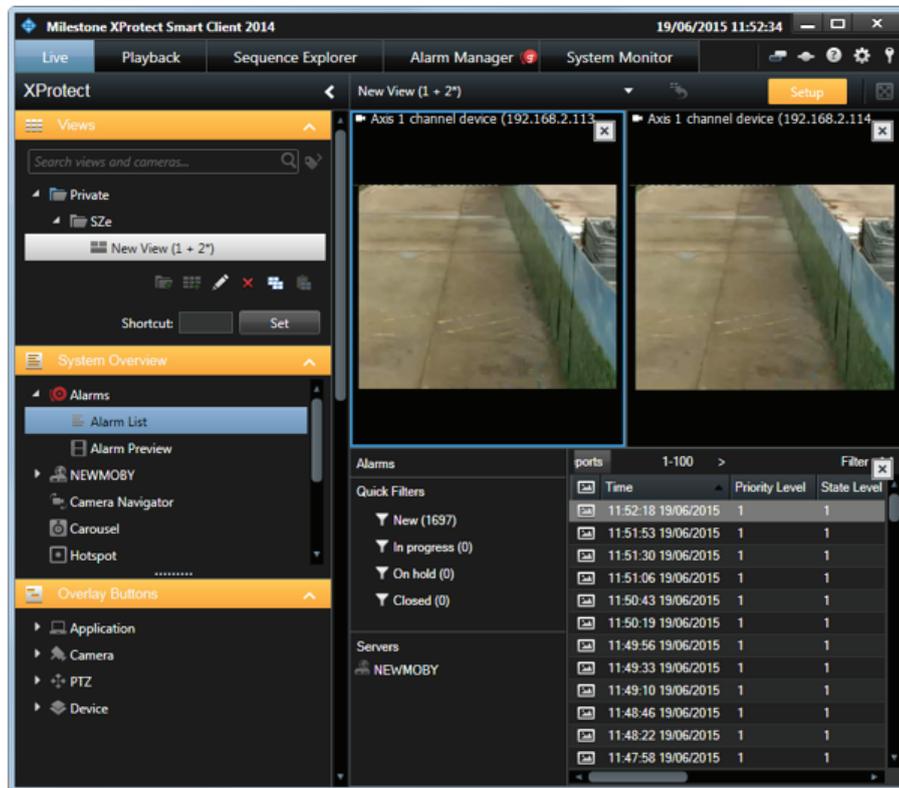
### **NOTICE**

Because of a Smart Client limitation, the Alarm Management video player does not display the recorded metadata. If you need to see the recorded metadata corresponding to an alarm video sequence, take note of the video sequence start time and camera and use the Playback tab of the Smart Client.

Alarms can also be displayed in a tile of the Live tab, by commuting to the Setup mode and dragging the Alarm list item into a free tile:

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If you are not interested in alarm reception in the Smart Client, you can deactivate the automatic triggering of alarms by the AXIS Perimeter Defender Metadata Bridge by using the Configuration Tool, as described in *Software installation on the host running the XProtect Recording Server on page 7*.

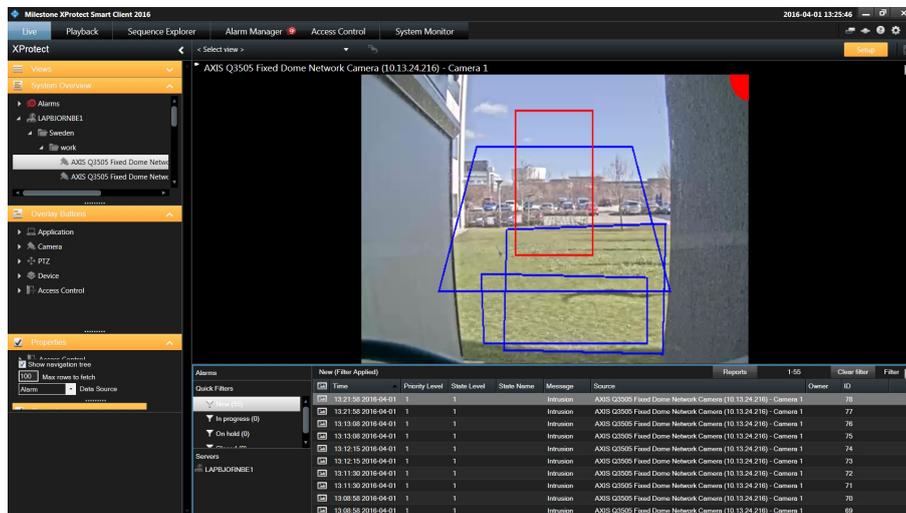
### User Defined Events

Once the necessary User-defined Events have been defined, they can be received and monitored in the Smart Client:

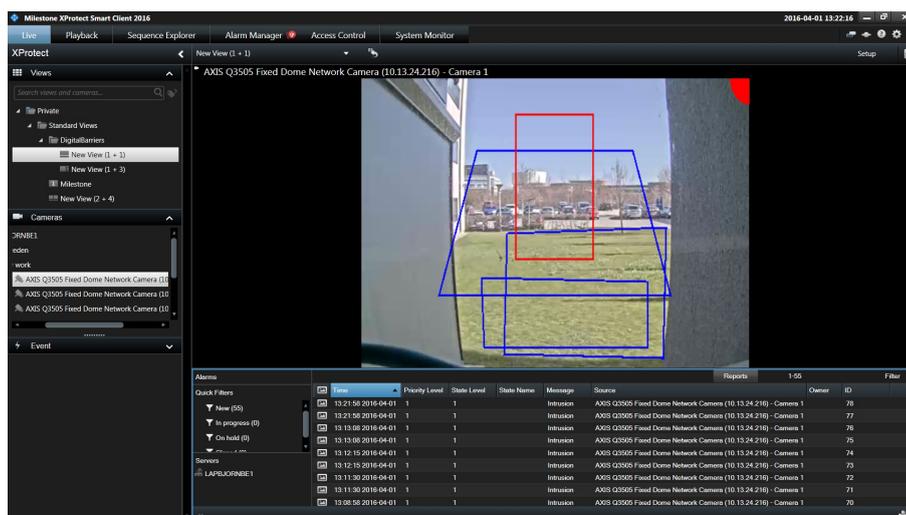
1. Open the **Setup** mode.
2. If not already done, drag the **Alarm List** in a free time as described in the previous section.
3. Select the **Alarm List** tile.
4. In the **Properties** section of the left panel, change the **Alarm** value of the combo box to **Event**:

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5. The AXIS Perimeter Defender triggered events are displayed in the corresponding tile when you commute back from the Setup mode:



6. You can also switch from alarms to User-defined Events in the Alarm Manager tab, by following the same procedure.

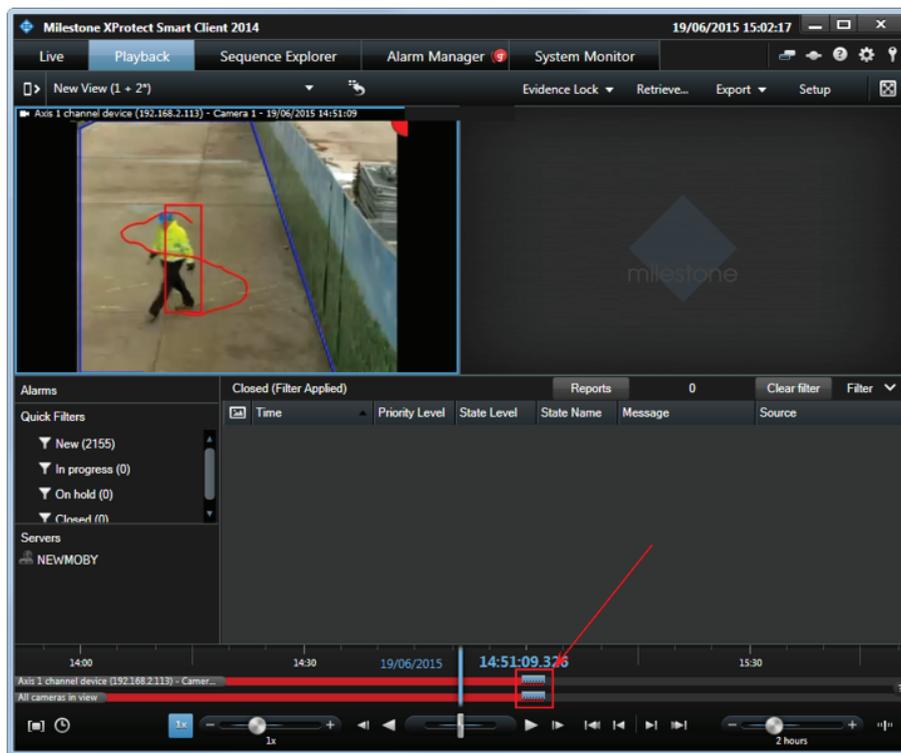
### Bookmarks

If the corresponding option is activated, bookmarks are automatically inserted in the corresponding video stream when AXIS Perimeter Defender triggers an alarm. They can be retrieved in the Smart Client, for example in the Playback tab:

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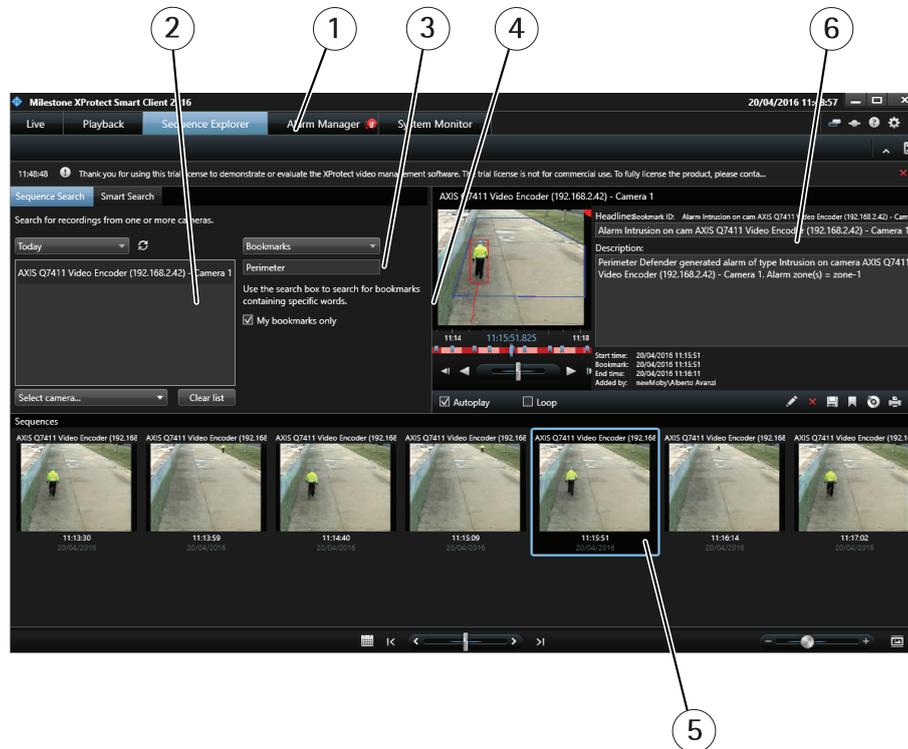


The Smart Client displays the bookmarks as grey ticks on the timeline.

Bookmarks can also be used to search for sequences in the Sequence Explorer tab:

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- 1 *Sequence explorer tab*
- 2 *Cameras*
- 3 *Combo box*
- 4 *Search for string*
- 5 *Bookmarked sequence*
- 6 *Bookmark details*

1. Open the **Sequence Explorer** tab.
2. Select the camera(s) of interest.
3. Select **bookmarks** in the combo box.
4. Enter the string to search for in the bookmarks name, for example "AXIS Perimeter Defender"
5. The corresponding bookmarked sequences are displayed in the lower pane.
6. The bookmark details are displayed in the right pane, and the corresponding sequence with the metadata overlay is displayed in the video player.

### Metadata Display

The Smart Client automatically displays the metadata on top of the corresponding video stream, both in live and in playback mode, in (almost) every video player in the Smart Client.

A typical metadata looks like in the following image:

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1. The upper right corner of the image contains a colored spot, the color displays the alarm status:
  - Red, if AXIS Perimeter Defender is running and an alarm is triggering for the camera (in the screenshot example, an intrusion alarm is generated by AXIS Perimeter Defender).
  - Green, if AXIS Perimeter Defender is running and no alarm is triggered for the camera (for example, for an intrusion scenario, if the person is walking outside the intrusion zone).
  - Gray during a short period (30-60 seconds) after AXIS Perimeter Defender has been started. During this phase AXIS Perimeter Defender is initializing and cannot generate alarms.
2. A rectangle surrounds the persons and/or vehicles detected in the scene. The color of the bounding box is red for persons and blue for vehicles.
3. The zones on ground relatives to the scenario(s) defined on the camera are displayed in blue. In this screenshot the intrusion zone is displayed. In the previous screenshot (the one inside Security Desk) one camera displays an intrusion zone and the other the two zones of a Zone-crossing scenario.
4. The approximate actor trajectory is displayed in red (for a person) or blue (for a vehicle).

The same overlay is also automatically displayed when the corresponding recorded video sequence is played back.

