AXIS Perimeter Defender with Milestone VMS

User Manual

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Introduction

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:

- With XProtect Corporate and Expert (starting from version 2014) it is possible to:
  - trigger "User Defined" events when AXIS Perimeter Defender generates an alarm
  - trigger "Video Analytics" events when AXIS Perimeter Defender generates an alarm
  - trigger "Alarms" when AXIS Perimeter Defender generates an alarm
  - insert a bookmark in the corresponding video sequence
  - show the live metadata generated by AXIS Perimeter Defender on top of the corresponding video stream in Milestone Smart Client
  - record the metadata generated by AXIS Perimeter Defender with the corresponding video stream, and to show them together when playing the video sequence in playback mode
- With XProtect Enterprise, Professional and Express it is possible to:
  - trigger "Manual Global Events" when AXIS Perimeter Defender generates an alarm
  - trigger "Video Analytics" events when AXIS Perimeter Defender generates an alarm
  - trigger "Alarms" when AXIS Perimeter Defender generates an alarm

This document describes how to configure both XProtect and AXIS Perimeter Defender to achieve these two types of integration, for each "family product". Note 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).

About this document

About this document

The next sections are independent from the installed XProtect product and should be read by every user.

- The software architecture (i.e. which software modules should be installed and where)
- How to install the software
- What prerequisites should be respected and what Milestone licenses are needed
- How to connect your AXIS Perimeter Defender to your Milestone system

At the end of section *Installation and first configuration steps*, the system is ready to receive Alarms, Analytics Events and User Defined Events/Manual Global Events. If that is enough for your needs, you can stop reading there.

If you need metadata display and recording (available in Corporate/Expert only) or if you need to trigger further actions by tweaking the XProtect configuration, then you can go to the chapter that is relative to your specific product, either XProtect Corporate or Expert, *page 13*, or XProtect Enterprise, Professional or Express *page 44*.

XProtect Corporate or Expert and *XProtect Enterprise/Professional/Express* include:

- How to connect the metadata from AXIS Perimeter Defender to Milestone (valid for XProtect Corporate only).
- How to leverage the Milestone Alarms, User Defined Events (in Corporate) or Manual Global Events (in Enterprise/Professional/Express) and Analytics Events to trigger further actions in your Milestone system (like activating a recording, sending an e-mail or an SMS or trigger an hardware output).
- How to operate the smart client.

Advanced configuration on page 55 include:

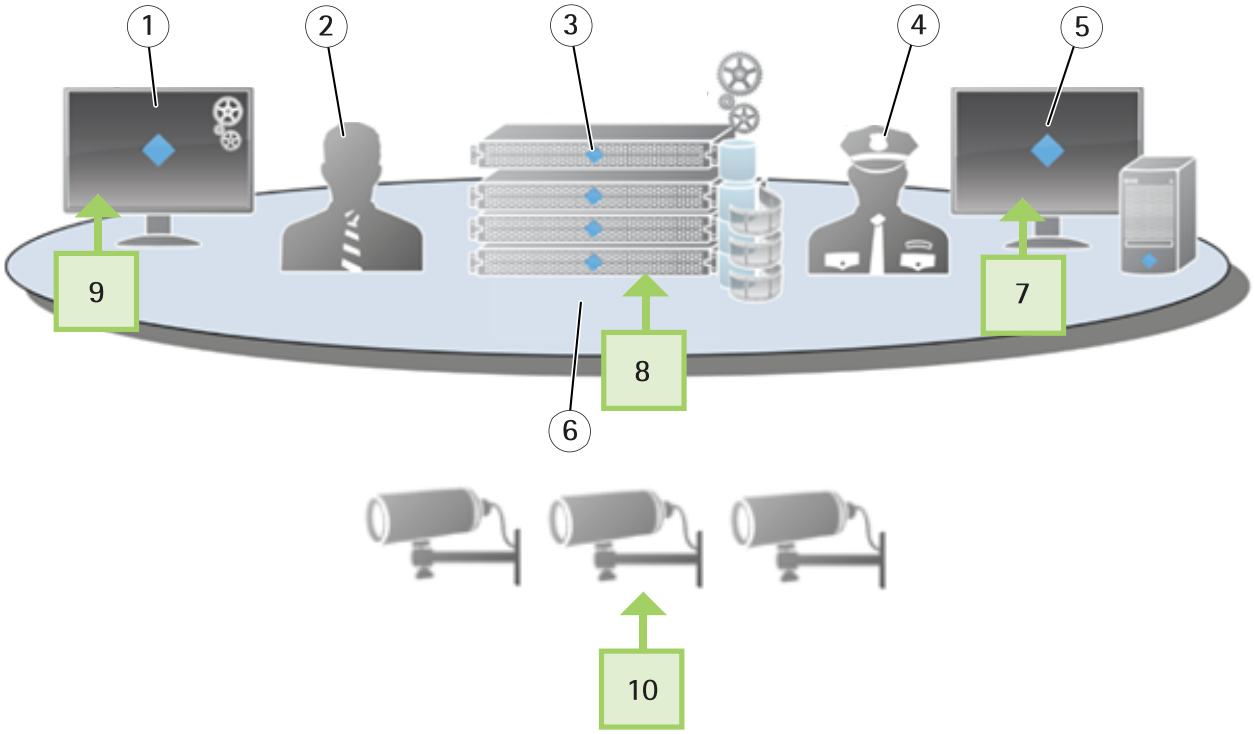
- A complete system architecture schema with emphasis on network communications between the different modules. See *Network communications on page 55*.
- How to extend an already installed and configured system by adding additional cameras. See *How to add new video sources to the system on page 56*.
- How to increase the number of the metadata channels of the MIP Driver. See *How to increase the number of channels of the MIP Driver on page 57*.
- How to remove from the bridge configuration video sources that have been removed from the system. See *How to remove video sources from the bridge configuration on page 60*.
- How to change the bridge server IP address. See *How to change the IP address of the bridge server on page 61*.
- How to change the Axis video source IP address. See *How to change the IP address of an Axis device on page 62*.
- How to enable XProtect to export the recorded metadata when exporting the corresponding video footages. See *How to enable metadata export when exporting video footages on page 63*.

AXIS Perimeter Defender integration

AXIS Perimeter Defender integration

Integration architecture

The integration between AXIS Perimeter Defender and XProtect is based on a set of software modules running on the XProtect servers.



The image shows 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*

These 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 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 4.6 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 and Expert from version 2014 (7.0d) including 2017 R1 (11.1a)
- Milestone XProtect Professional+, Express+ and Essential+ from version 2017 R1 (11.1a)

AXIS Perimeter Defender Bridge version 3.0.0 has dropped support for Milestone XProtect Enterprise, Professional and Essential. In that case, we recommend to use the version of AXIS Perimeter Defender 2.0.0.

Licensing

Note

This section only applies to XProtect Corporate/Expert. Enterprise does not need any additional Milestone licenses.

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 connected cameras and all of them have AXIS Perimeter Defender installed. The system must record and show the AXIS Perimeter Defender metadata. In this case, the total number of required DLK is 51.
- The system has 50 connected cameras and half of them have AXIS Perimeter Defender installed. The system must record and show the AXIS Perimeter Defender metadata. In this case, the total number of required DLK is 51.
- The system has 50 connected cameras and half of them have AXIS Perimeter Defender installed. The other half feeds a server that analyzes the 25 video streams. The system must record and show the AXIS Perimeter Defender metadata. In this case, the total number of required DLK is 51.
- The system has 50 connected cameras and 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 and first configuration steps

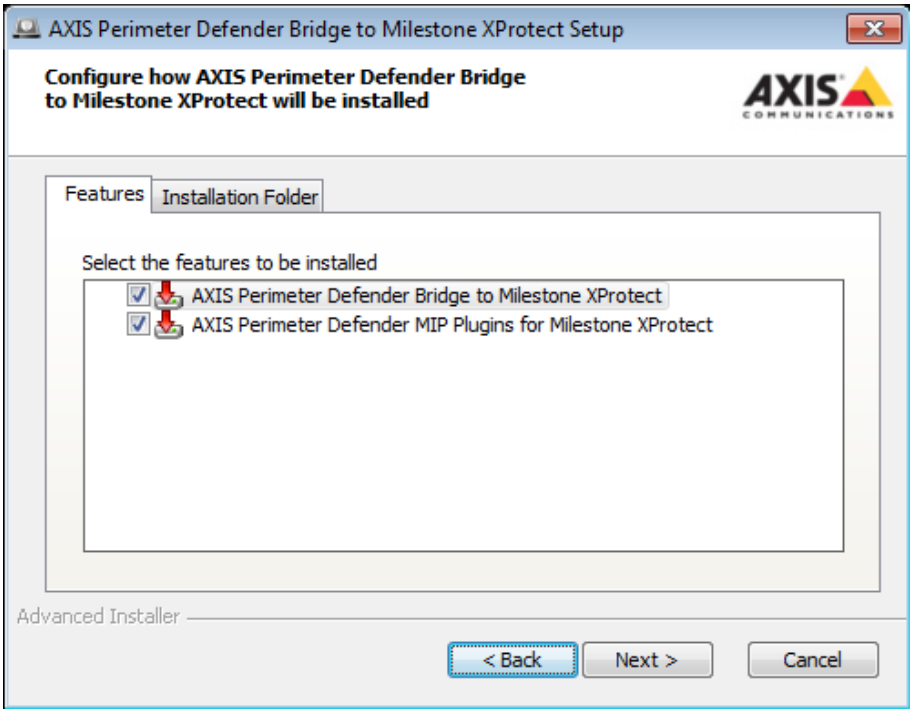
This section is valid both for XProtect Corporate/Expert and XProtect Enterprise/Professional/Express.

- To install the necessary software, go to *Installation on page 7*.
- To connect AXIS Perimeter Defender devices to your XProtect System, go to *Add Axis devices running AXIS Perimeter Defender to XProtect on page 10*.

At the end of this section, your system is ready to receive Alarms, Analytics Events and User Defined Events/Manual Global Events.

Installation

The installer executable ("AXIS Perimeter Defender Milestone XProtect Integration Pack X.Y.Z.W.exe") installs both the AXIS Perimeter Defender Alarm & 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:



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

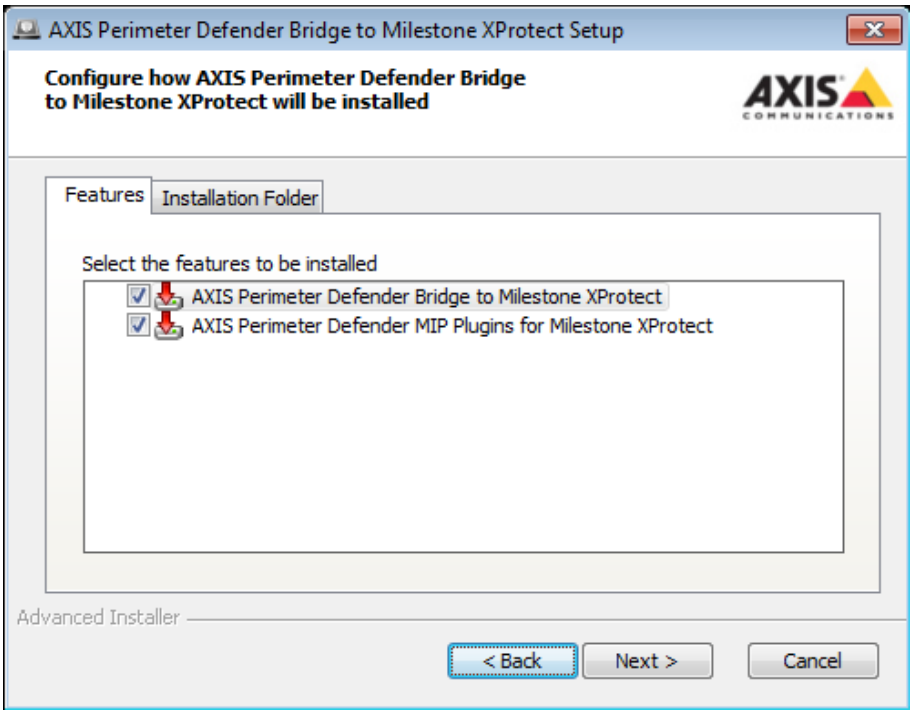
Installation and first configuration steps

Software installation on the host running the Management Client/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, run "AXIS Perimeter Defender Milestone XProtect Integration Pack X.Y.Z.W.exe".
2. Click **Next**.
3. Accept the EULA and click **Next**.
4. If you plan to run the Metadata Bridge on another host, clear **AXIS Perimeter Defender Bridge to Milestone XProtect**. In any case, select **AXIS Perimeter Defender MIP Plugins for Milestone XProtect**. Click **Next**.



5. Click **Install**.
6. Wait for the installation to be completed, then click **Finish**.

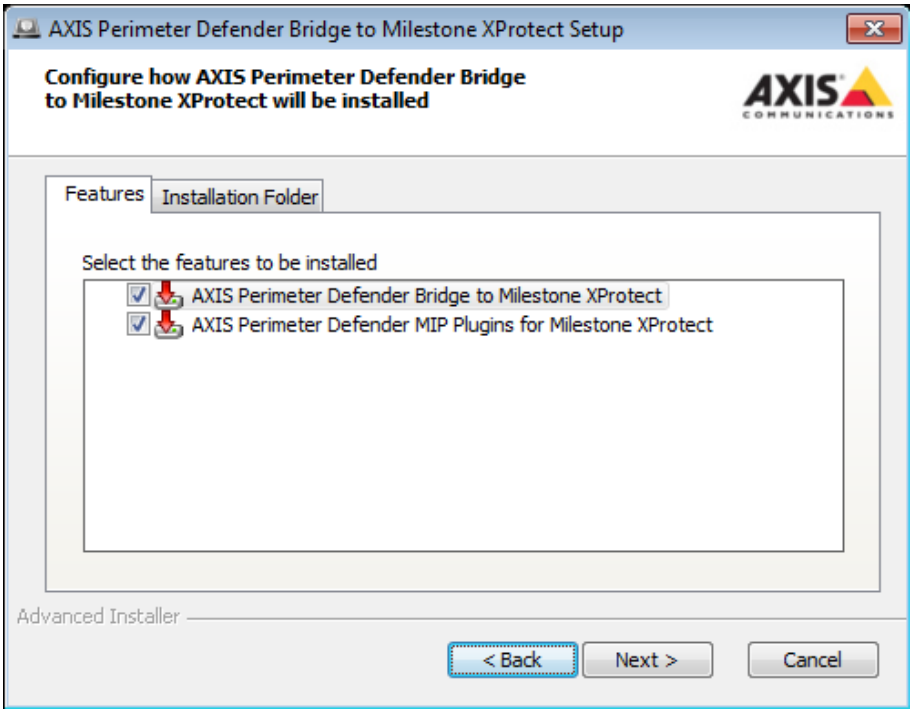
Software installation on the host running the XProtect Recording Server

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, run "AXIS Perimeter Defender Milestone XProtect Integration Pack X.Y.Z.W.exe".
2. Click **Next**.
3. Accept the EULA and click **Next**.

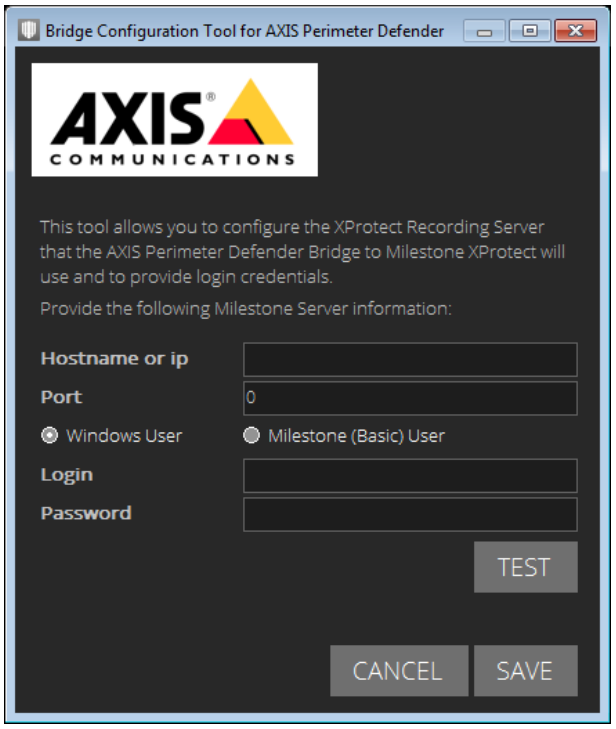
4. If you have a Management Client installed on this host and you plan to configure the system with it, select **AXIS Perimeter Defender MIP Plugins for Milestone XProtect**. In any case, the **AXIS Perimeter Defender Metadata Bridge** should selected.



5. Click **Install**.

6. Wait for the installation to be completed, then click **Finish**.

7. In the AXIS Perimeter Defender Metadata Bridge Configuration, **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.



8. **Port** is the port configured in the XProtect Server for SDK connections. If this value has not been customized in your installation, use the default value. Otherwise, use the custom port value you have set up.
9. Select if the login uses an existing **Windows user** or a **Milestone user** defined in the XProtect System 11.
10. In the **Login** field, enter the username. For a Windows user, it is necessary to prefix the login name with the user domain, as in "domain\username". For a Milestone user, only the username should be used.
11. Enter the password. If you are using a Windows user, do not forget to provide the user password in this field
12. Click **Test** to check the connection. If not, fix the problem by providing the correct information.
13. Click **Save**.

This allows AXIS Perimeter Defender Metadata Bridge to connect to the XProtect Server.

Add Axis devices running AXIS Perimeter Defender to XProtect

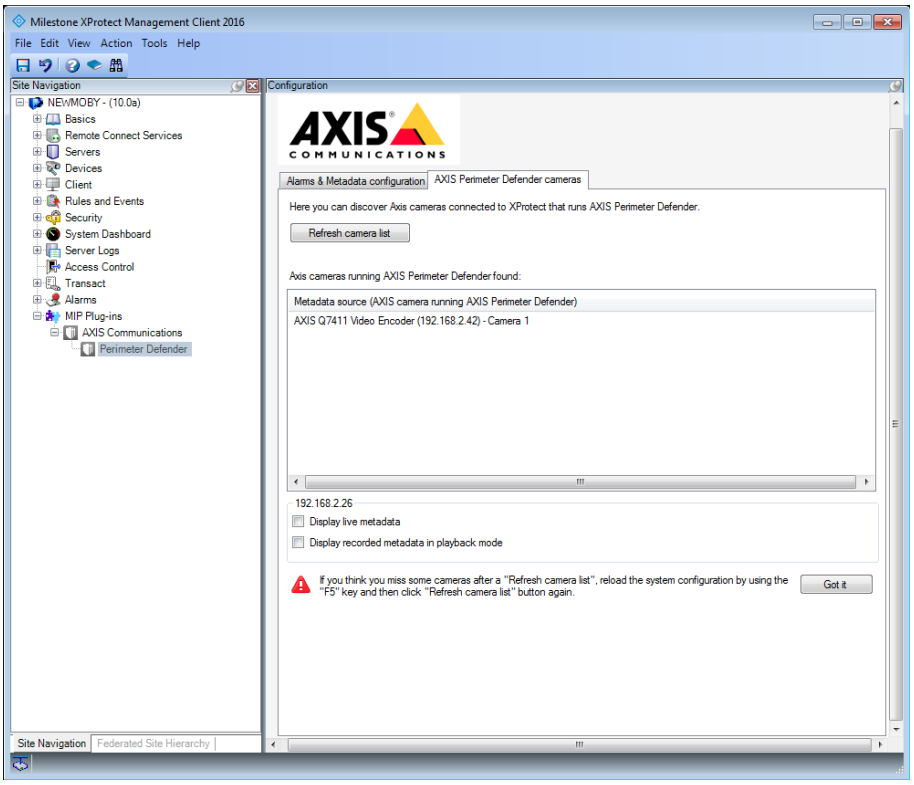
This section describes how to add the AXIS Perimeter Defender instances running on Axis ACAP devices connected to your XProtect system.

Note

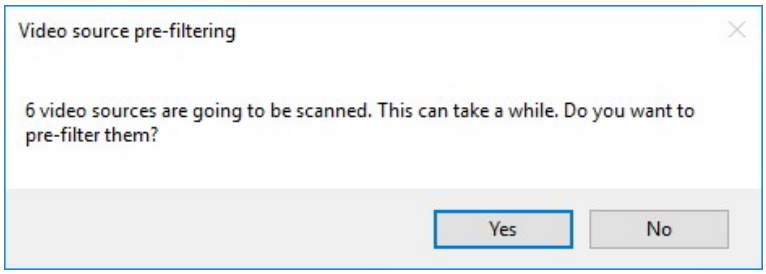
This section includes screenshot examples from an XProtect Corporate/Expert installation, but the steps are the same for XProtect Enterprise/Professional/Express.

If you have Axis devices with AXIS Perimeter Defender, you need to add them to XProtect as video sources (this is a mandatory step) and then you need to add them to the MIP Plugin configuration so that they can be used as alarm and (under Corporate/Expert) as metadata sources also. Do the following:

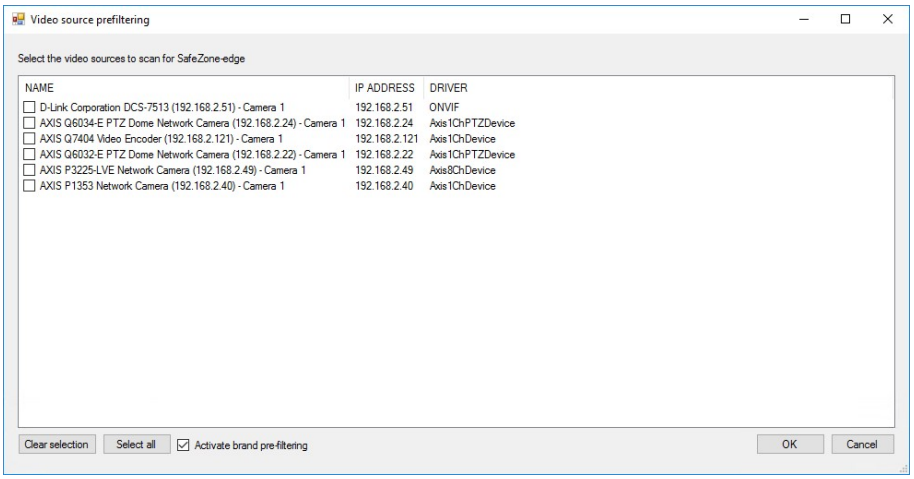
1. Add all the Axis devices to XProtect as video sources (cf XProtect documentation)
2. Go to **MIP Plug-ins** >**AXIS Communications** > **Perimeter Defender**.



3. Select the **AXIS Perimeter Defender cameras** tab.
4. Click **Scan new cameras**.
   - If you click **No**, the scan will be performed on all the enabled video sources connected to the XProtect System.
   - If you want to pre-filter the cameras to scan, select **Yes**.



Select a sub-set of the available cameras. The advantage of reducing the set of cameras that are scanned to find AXIS Perimeter Defender instances is that this operation can take long time. By reducing the cameras set to those supposed to have AXIS Perimeter Defender installed, i.e. Axis cameras as other brands cannot run ACAP applications like AXIS Perimeter Defender. Select **Activate brand pre-filtering**.



Important

Valid for XProtect Corporate/Expert:
The **Scan new cameras** operations only adds new video sources running the AXIS Perimeter Defender application. It doesn't remove an already existing video source from the configuration, even if it has been disabled or removed from the system (and hence not found during the scan). To remove a video source from the configuration, see *How to remove video sources from the bridge configuration on page 60*.

5. The MIP Plugins scans all the selected video devices of the XProtect system (skipping the disabled and not selected ones) and selects the Axis devices having AXIS Perimeter Defender installed. The list of the selected devices is shown in the central widget, alongside with the version of the installed package.

Important

When new cameras have just been added to the system, it is possible that they 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.

6. Save the configuration.

The selected cameras are now added to the system and are automatically used as alarm and metadata sources.

XProtect Corporate or Expert

Configuration

Through the MIP Plugins for AXIS Perimeter Defender running in the XProtect Management Client you can configure different aspects of the system:

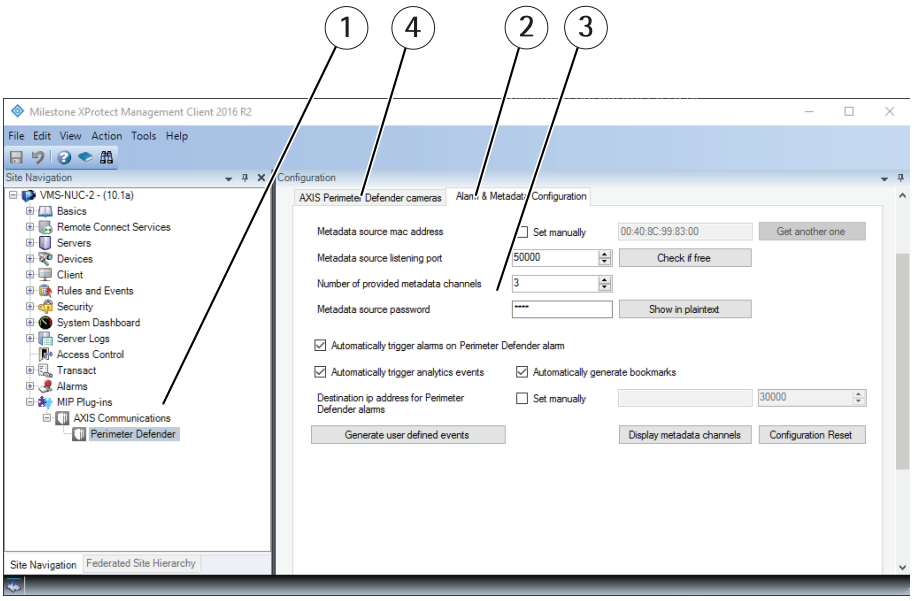
- You can scan the list of cameras defined within XProtect and automatically select those where AXIS Perimeter Defender is installed. See *Add Axis devices running AXIS Perimeter Defender to XProtect on page 10*.
- The plugin automatically configures a Metadata Source providing a metadata channel for each Axis camera with AXIS Perimeter Defender. The Metadata Source is implemented and executed by the AXIS Perimeter Defender Metadata Bridge and must be added to the XProtect System. You can 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.
- 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 user can also manually define additional User Defined events.

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.

1. Open the Management client.
2. Go to **MIP Plugins** >**Axis Communication** > **Perimeter Defender** .



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

3. Select the **Alarms & Metadata configuration** tab.

4. If you want to show or record metadata, go to *Configure metadata through the Management Client Plugin on page 16*. Otherwise, you can skip the configuration of the Metadata source.

5. Configure alarms and bookmarks:

   - If you want to automatically trigger an XProtect alarm when AXIS Perimeter Defender generates one, select **Automatically trigger alarms on AXIS Perimeter Defender alarm reception**.

   - If you want to automatically trigger an XProtect Video Analytics Event when AXIS Perimeter Defender generates an alarm, select **Automatically generate analytics events**.

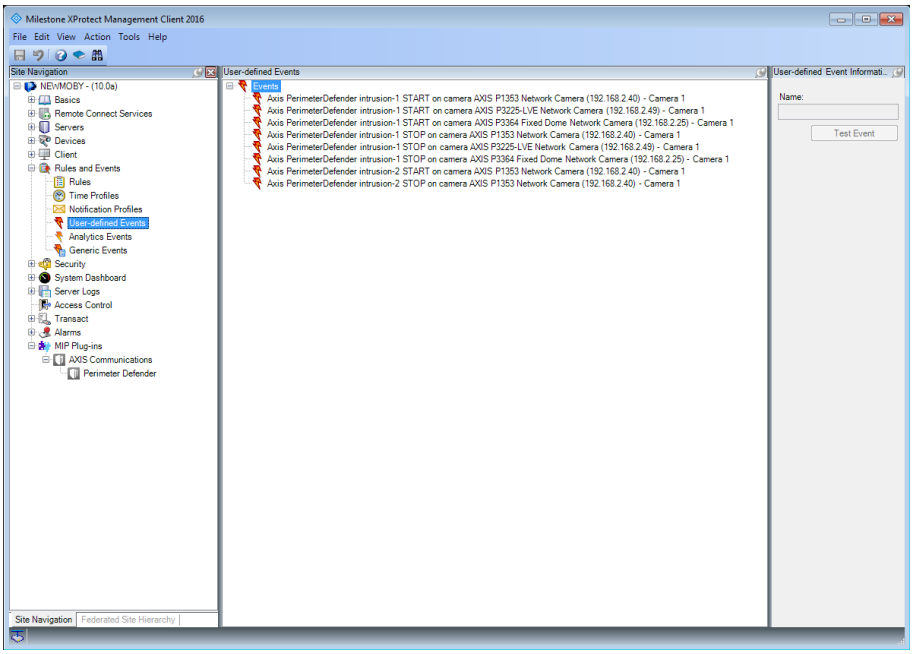
   - If you want to automatically insert in the corresponding XProtect video stream a bookmark, select **Automatically generate bookmarks**.

   - In most of the cases, you don't need to manually specify the destination IP address and listening port for alarms (i.e., the port that the AXIS Perimeter Defender Alarm & Metadata Bridge uses to listen for incoming alarms from AXIS Perimeter Defender and its IP address as used by the AXIS Perimeter Defender instances to send alarms). In some special cases, like when there is a NAT or port forwarding between the AXIS Perimeter Defender devices and the host where the Alarm & Metadata bridge runs, you might want to set them manually. In this case, select **Set Manually** and enter the IP address or DNS hostname and port that the AXIS Perimeter Defender devices should use to send the alarms.

6. 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** button to automatically generate some of them. The button parses the scenarios defined in each AXIS Perimeter Defender device and generates a couple of User Defined Events (one for the start, the other for the stop of the scenario) that the AXIS Perimeter Defender Alarm & Metadata Bridge triggers when AXIS Perimeter Defender generates the corresponding alarm. For example, by clicking the button on a system with one AXIS Perimeter Defender camera (192.168.2.246) with 4 scenarios (named "conditional-1", "intrusion-1", "loitering-1" and "zone-crossing-1") and an AXIS Perimeter Defender stream with one scenario, "intrusion-1", the configuration plugin generates these XProtect User Defined Events:

7. Save the configuration

8. You can retrieve the User Defined Events by clicking **Rules and Events** > **User-defined Events**.



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

You can also modify them to make them more generic, for example to make a single User Defined Event to be triggered by several different alarms. To do that, you can edit the User Defined Event name and replace one or more of the fields **<ScenarioName>**, **<ScenarioType>** and **<CameraName>** with the keyword **ALL**.

Every User Defined Event that is supposed to be triggered on an AXIS Perimeter Defender alarm must have a name that respects a specific format: **AXIS Perimeter_Defender <ScenarioName> <ScenarioType>** on camera **<CameraName>** where:

- **<ScenarioName>** is the name of the scenario as defined in the AXIS Perimeter Defender Setup. Usually it looks like "Intrusion-1", but can be customized when setting up AXIS Perimeter. If you want the User Defined Event to be triggered by any scenario, use "ALL" as **<ScenarioName>**.
- **<ScenarioType>** is either "START", "STOP" or "ALL". Use "ALL" if you want the User Defined Event to be triggered for both START and STOP alarms.
- **<CameraName>** is the name of the camera as defined in XProtect. When AXIS Perimeter Defender triggers an alarm, it does so by analyzing images from a device that must also be present in XProtect. For AXIS Perimeter Defender, this is the device where AXIS Perimeter Defender is installed. **<CameraName>** is the name of the associated XProtect Camera. Use "ALL" if the Manual Global Event must be triggered by AXIS Perimeter Defender alarms associated to any XProtect camera.

Important

If you want to use an XProtect Camera Name as **<CameraName>**, you must replace the spaces in the name by the "underscore" (_) character. Alternatively, you can rename the XProtect Camera and remove all spaces from the camera name, or use ALL as **<CameraName>**.

NOTICE

The three parameters **<ScenarioName>**, **<ScenarioType>**, and **<CameraName>** are all case insensitive, so lowercase and uppercase letters are considered the same.

Here some examples of User Defined Events and by which AXIS Perimeter Defender alarms they will be triggered:

- **AXIS PerimeterDefender Intrusion-1 START on camera ALL**: will be triggered by any AXIS Perimeter Defender alarms START related to a scenario called "Intrusion-1" from any camera
- **AXIS PerimeterDefender ALL ALL on camera IP250**: will be triggered by any AXIS Perimeter Defender alarm START or STOP related to any scenario from the XProtect Camera "IP250"
- **AXIS PerimeterDefender ALL START on camera ALL** : will be triggered by any AXIS Perimeter Defender alarm START related to any scenario from any camera
- **AXIS PerimeterDefender ZoneCrossing-1 STOP on camera IP250** : will be triggered by any AXIS Perimeter Defender alarms STOP related to the scenario "ZoneCrossing-1" from XProtect camera "IP250"

Important

If you rename a camera, remember to adapt the corresponding User Defined Events accordingly.

NOTICE

- 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 the section *Configure metadata through the Management Client Plugin on page 16*
- When you change the User Defined Events names you must restart the AXIS Perimeter Defender Alarm & Metadata Bridge service for the change to take effect.

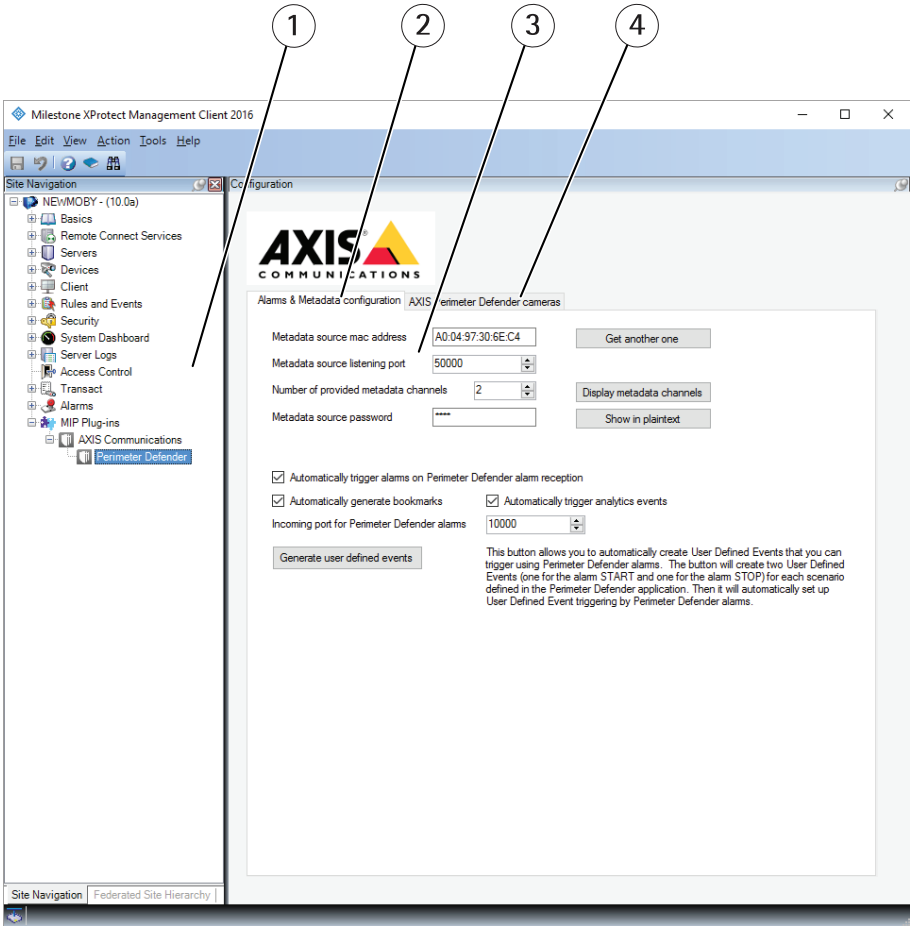
Configure metadata through the Management Client Plugin

Important

Before you can add the metadata source to the XProtect System, the AXIS Perimeter Defender metadata bridge must be fully installed and configured, i.e. by providing the XProtect login credentials and IP address.

Before displaying or recording the metadata in XProtect, you need to configure the Metadata Source that XProtect uses to pull the metadata streams from AXIS Perimeter Defender. Milestone consider the Metadata Source as a normal video source, and you have to add it as if it were a video source on its own.

1. Open the Management client.
2. Click **MIP Plugins**, **Axis Communication**, **Perimeter Defender** .
3. Click the **Alarms & Metadata configuration** tab.



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

4. Configure the parameters of the metadata source:

   - Use the default MAC address. If you want to provide your own MAC, for example, because you plan to add more than one metadata source to the system, select **Set manually** and click **Get another one** button or type the MAC address in the address field.

   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 listens for incoming connections from XProtect. The metadata source logically behaves like a physical device (like a multi-channel encoder) but distributes metadata streams instead of video streams. This listening port is the equivalent to the port 80 of an HTTP-based network device. Use the default value unless another application already uses this port on the host. To check if it's being used, click the **Check if free** button. Note that this button requires the AXIS Perimeter Defender Alarm & Metadata Bridge to be running.

   - The number of provided metadata channels is automatically set to the number of AXIS Perimeter Defender found or configured in the system. If you want more metadata channels, for example because you know you will add more AXIS Perimeter Defender instances in the future, you can increase this number.

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 or to use the Replace hardware functionality (cf. XProtect User Guide)

- The Management Client requests a metadata source password when adding the metadata source to the system. If you want to see the password, click and hold the **Show in plaintext** button.

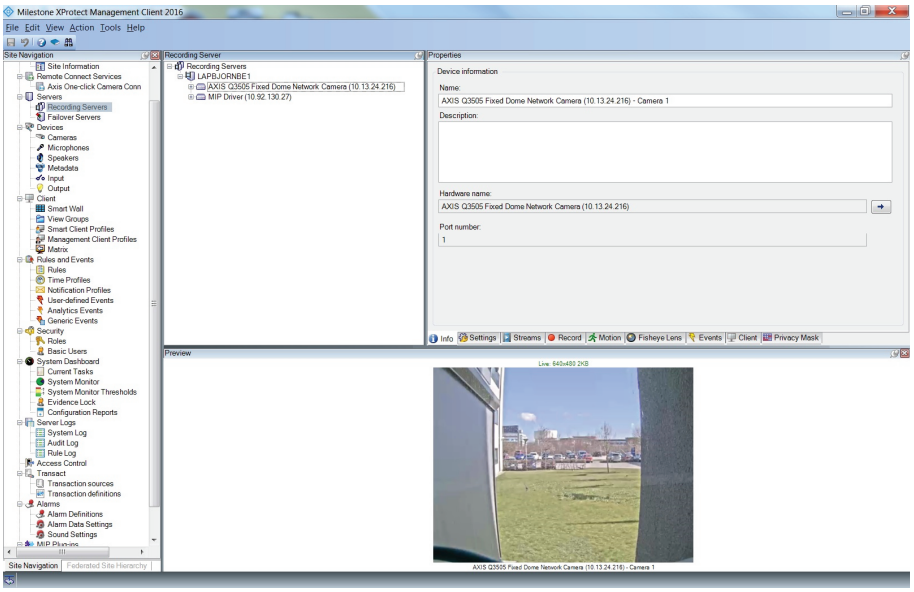
Important

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

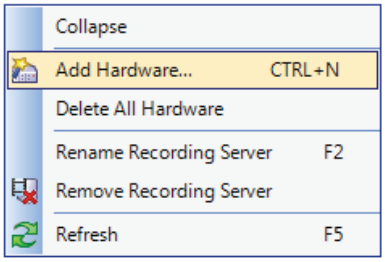
5. The **Display metadata channel** opens a dialog that shows what AXIS Perimeter Defender instance is feeding a given metadata channel with metadata. The same dialog allows you to "free" a metadata channel whose video source is not connected to the system anymore (see section*How to remove video sources from the bridge configuration on page 60*

When the metadata source is configured, you need to add it to the XProtect system so that XProtect can pull metadata out from AXIS Perimeter Defender:

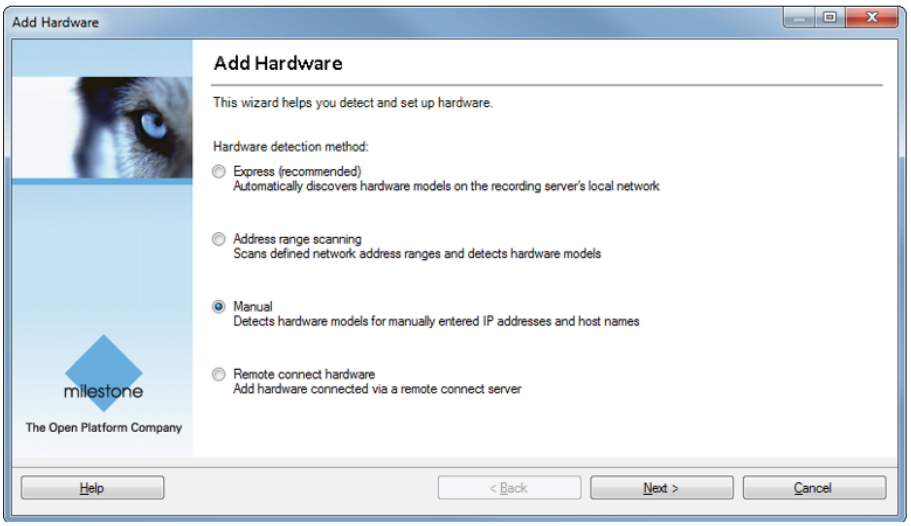
1. In the Management Client, go to **Servers** >**Recording Servers**.



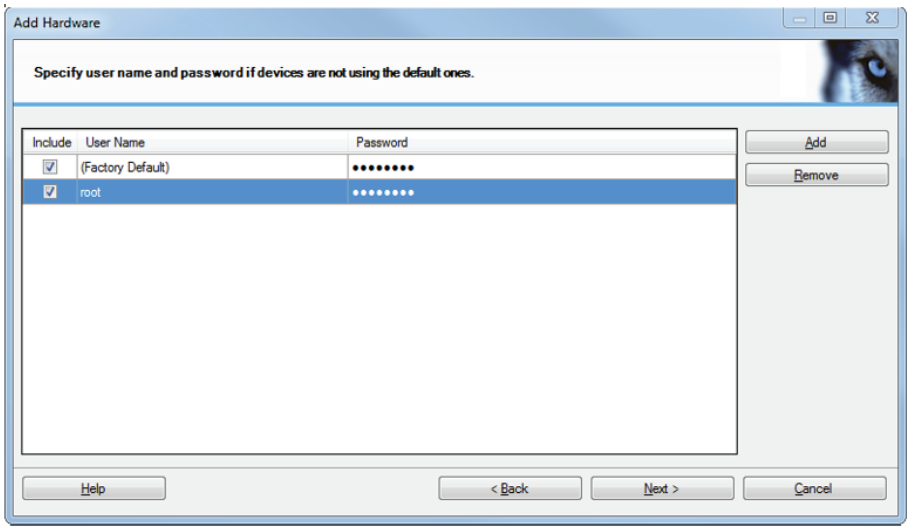
2. Right-click the server and select **Add hardware**.



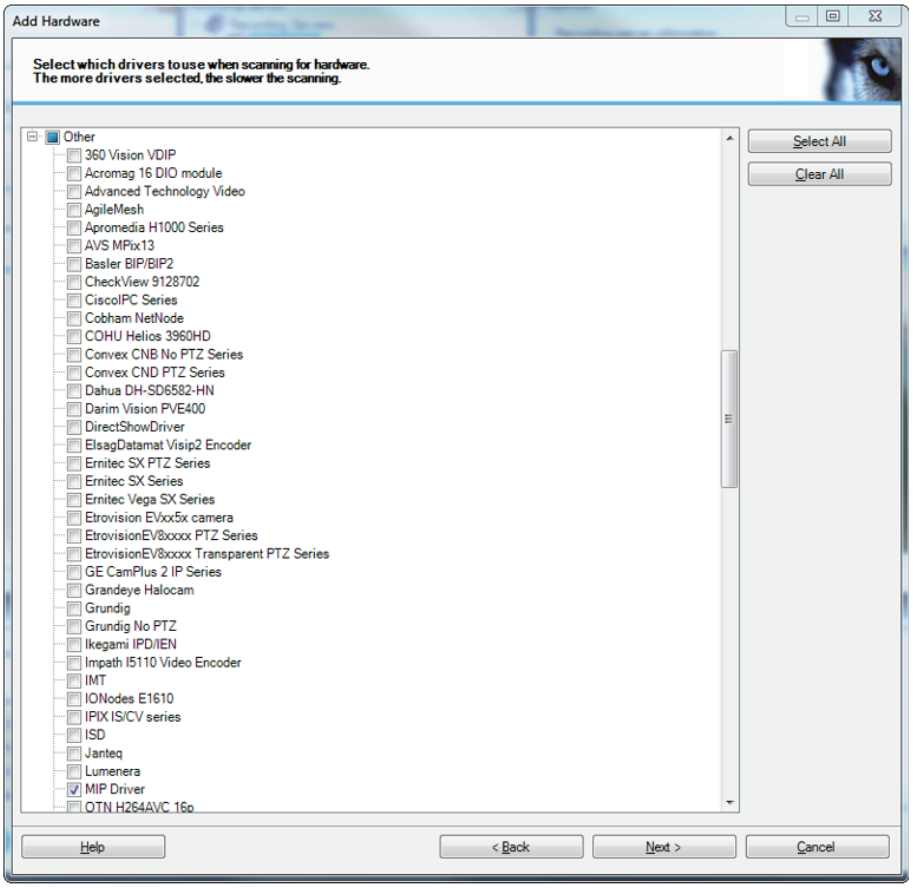
3. Select **Manual** and click **Next**.



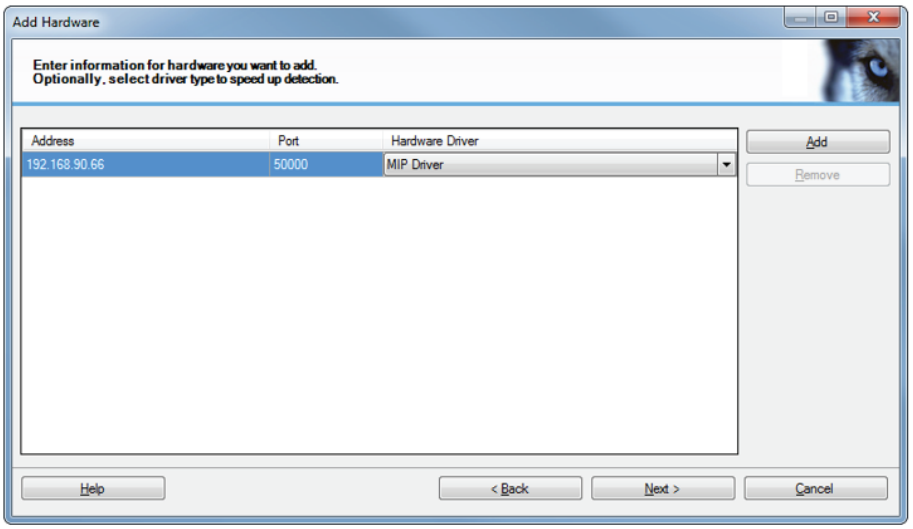
4. Add a new username and password using "root" as login and the password you set for the Metadata source.
5. Click **Next**.



6. Select **Other** > **MIP Driver** as device type and click **Next**.

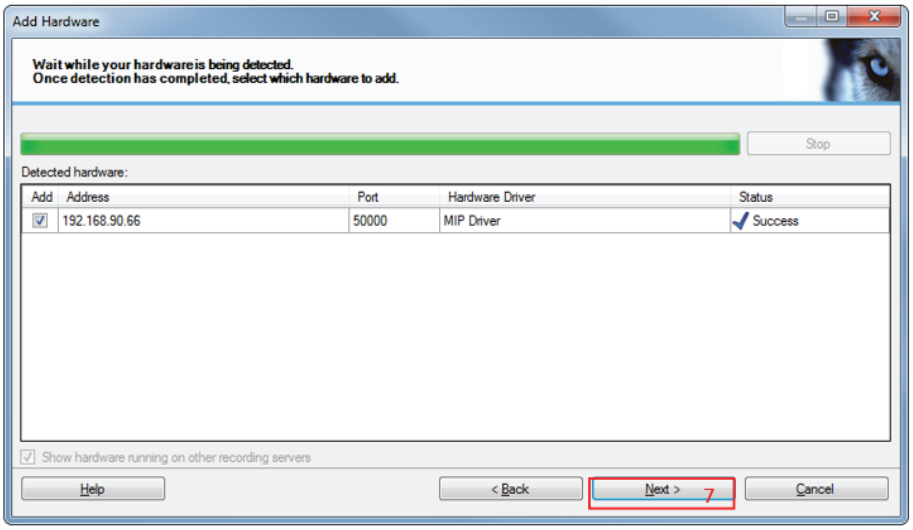


7. Enter the IP address of the host where the AXIS Perimeter Defender Metadata Bridge is installed. Use the public external IP address of the host, even if it is installed locally, as 127.0.0.1 does not work. You can use "netstat –an" and look to which IP address is associated to the listening socket open on port TCP/50000 (or the port that has been chosen for the metadata source).
8. In the **Hardware Driver** drop-down list, select **MIP Driver**. Note that **Auto-Detect** does not work.
9. Click **Next**.



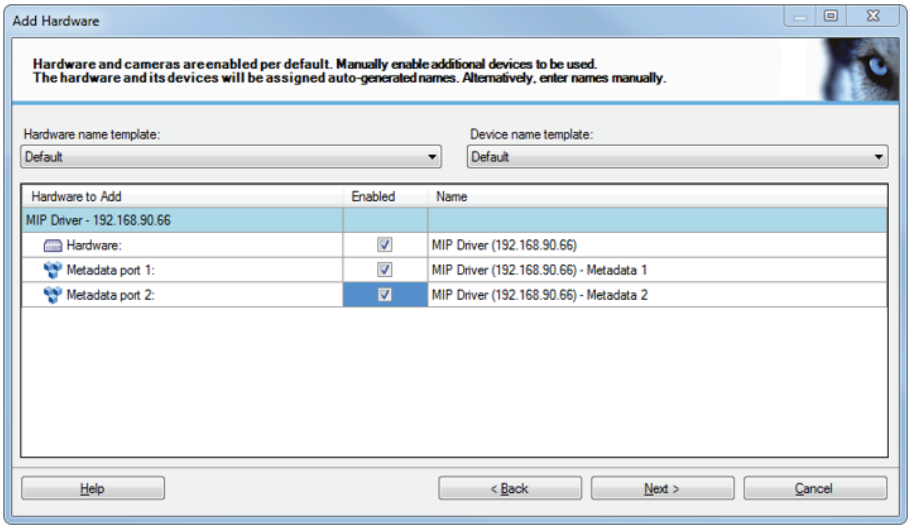
In this screenshot the address to use is 192.168.90.66.

10. When XProtect has detected and accepted the metadata source, click **Next**.



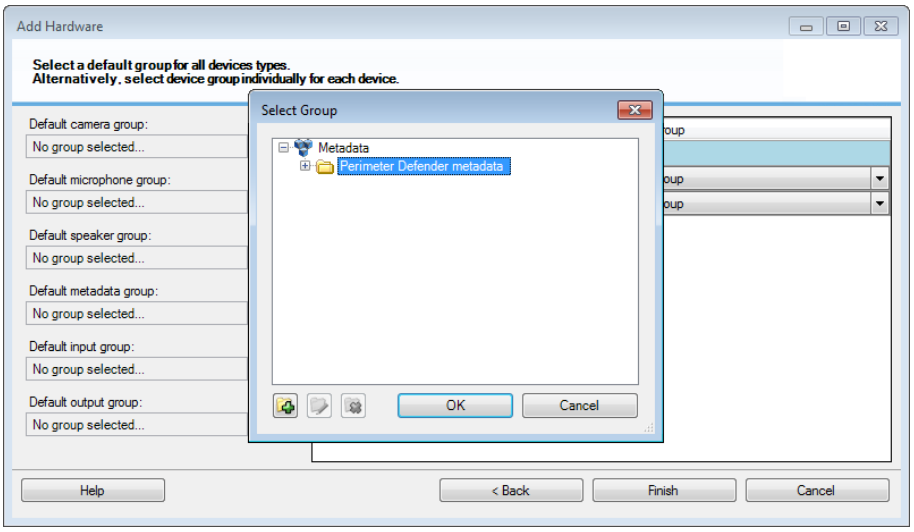
11. Select the metadata channels as the Axis cameras running AXIS Perimeter Defender that send metadata to the system. Usually this means all the metadata channels available on the source, except if you increased the number of channels manually to prepare future extensions. In this case, we recommend selecting only the effectively used channels.

12. Click **Next**.



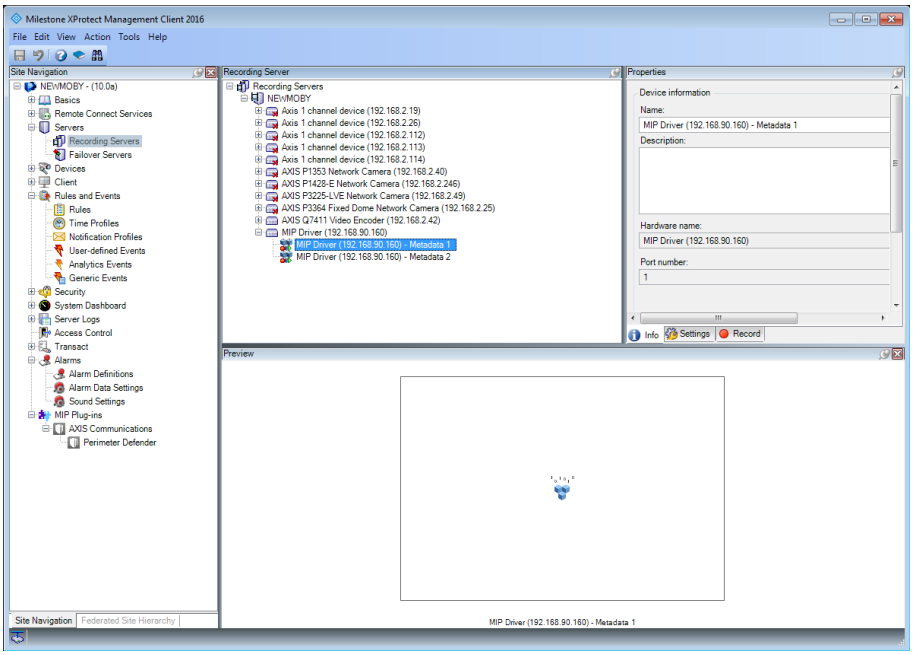
The screenshot shows how to enable channels provided by the metadata source.

13. Select a group, or create a new group, for the **Default metadata group**, then click **Finish**.



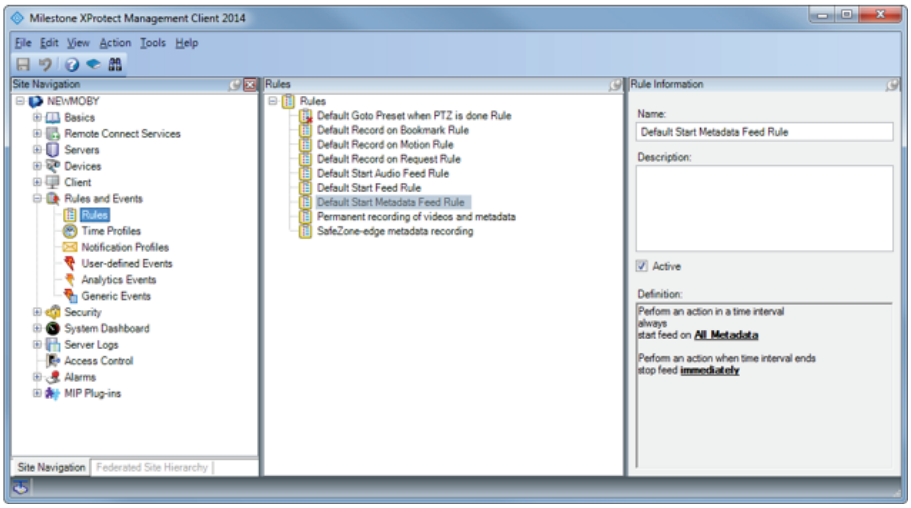
14. Select the newly added Metadata source "MIP Driver (192.168.90.66)".

15. In the **Stream** window, make sure a set of "1/0" comes out from the central cubes. This means that XProtect is retrieving the metadata from the source.



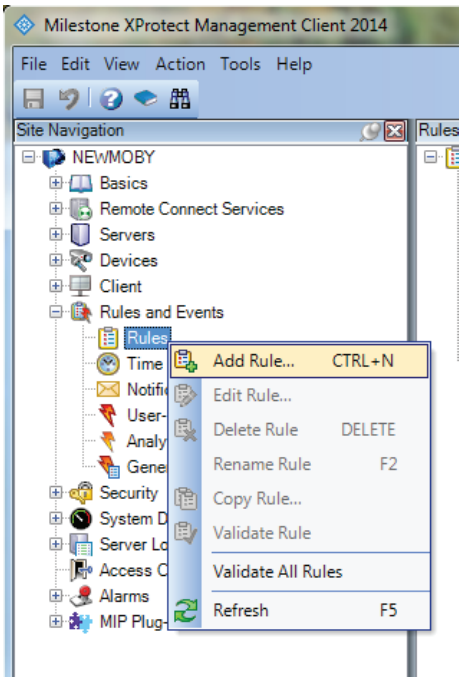
16. If you don't see any "1/0" near the central cube, there is a problem with the metadata retrieval, probably due to the lack of a default rule. Do the following:

    - In the **Rules and Events** section, make sure that you have a **Default Start Metadata Feed Rule** and that the rule looks like in the following image.

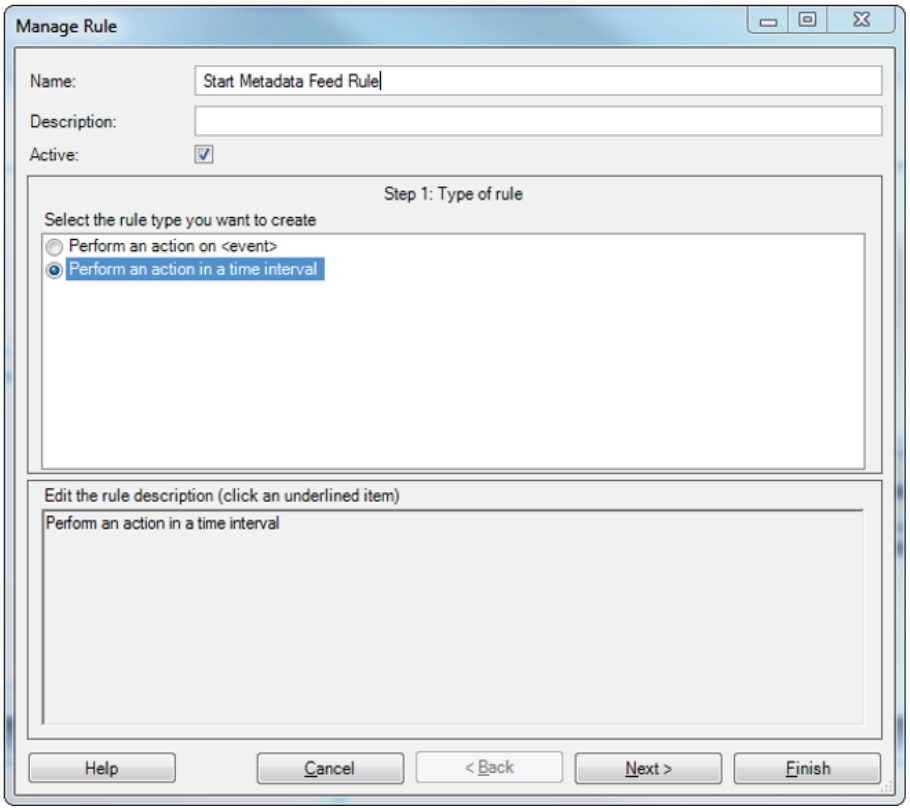


    - If the rule is missing, you must define the rule:

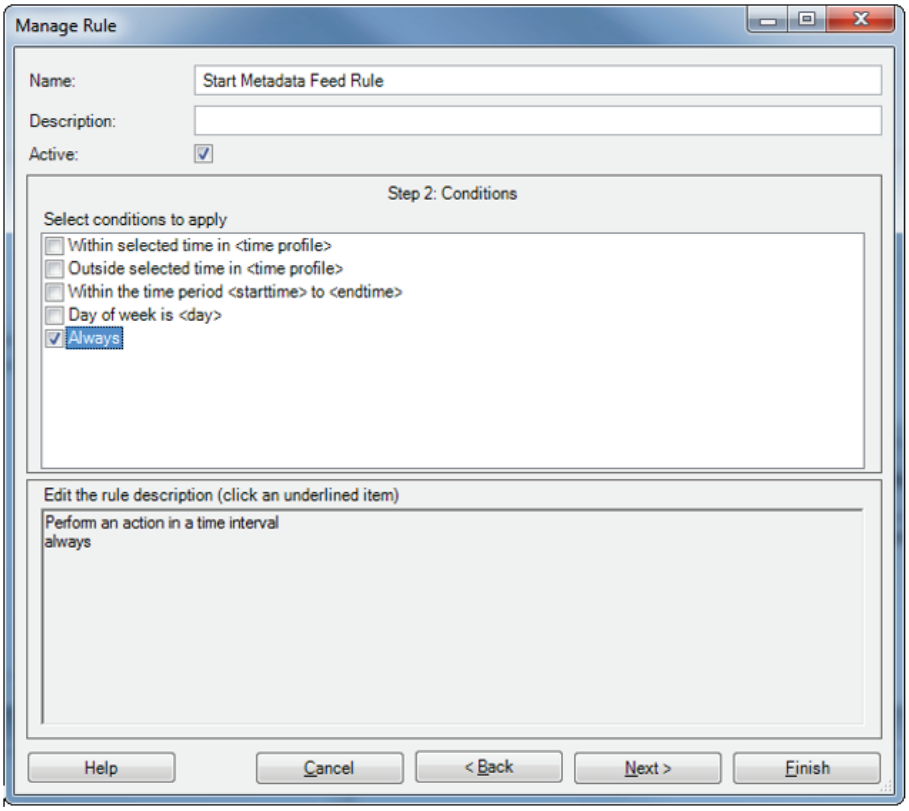
    - In the **Rules and Events** section, right-click **Rules** and select **Add Rule**.



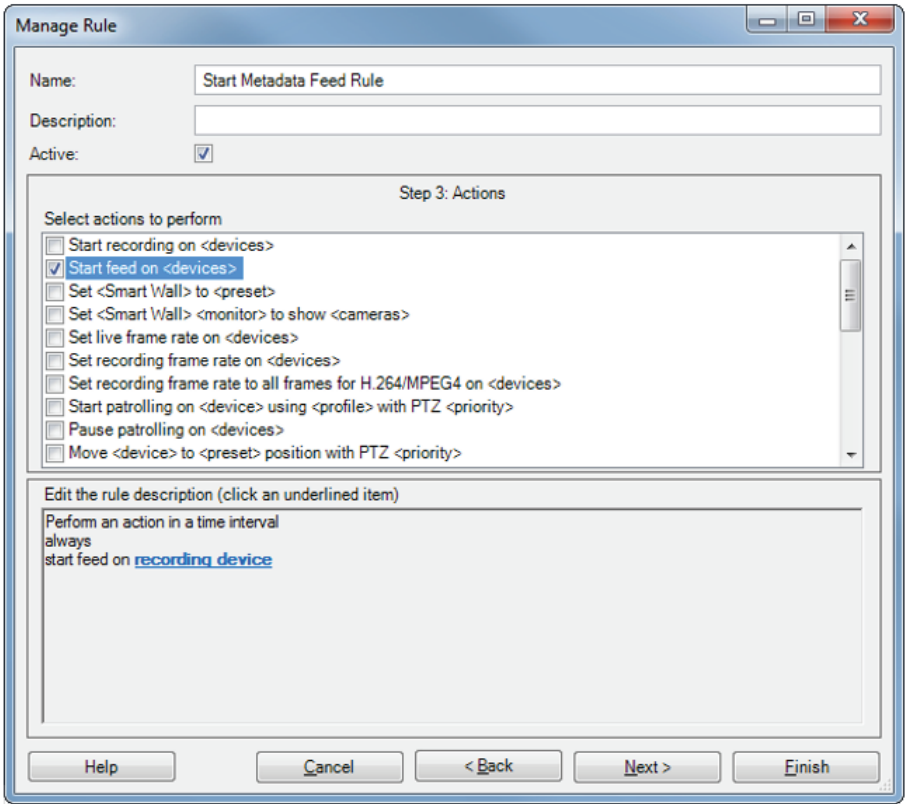
- Type name for the rule, then select **Perform an action in a time interval** and click **Next** .



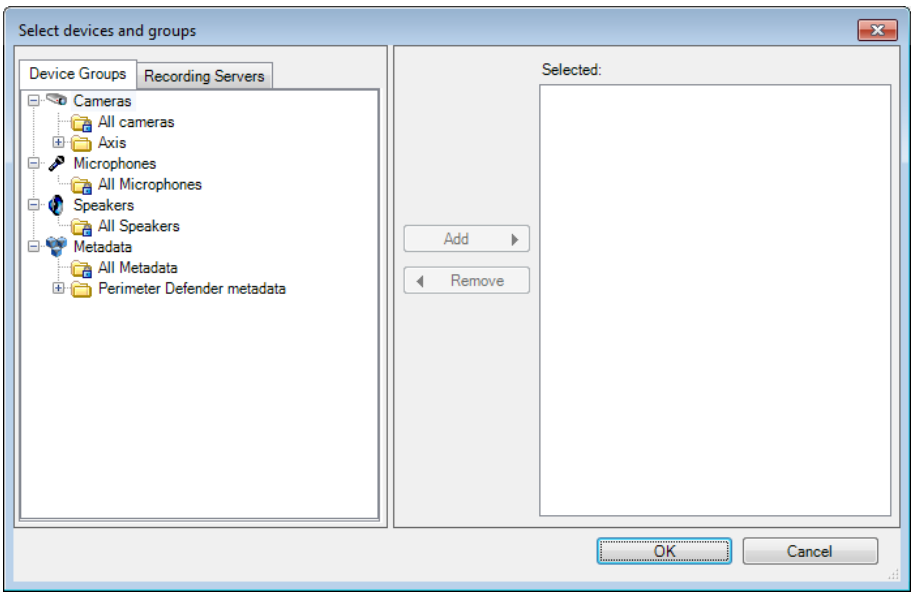
- Select **Always** and click **Next**.



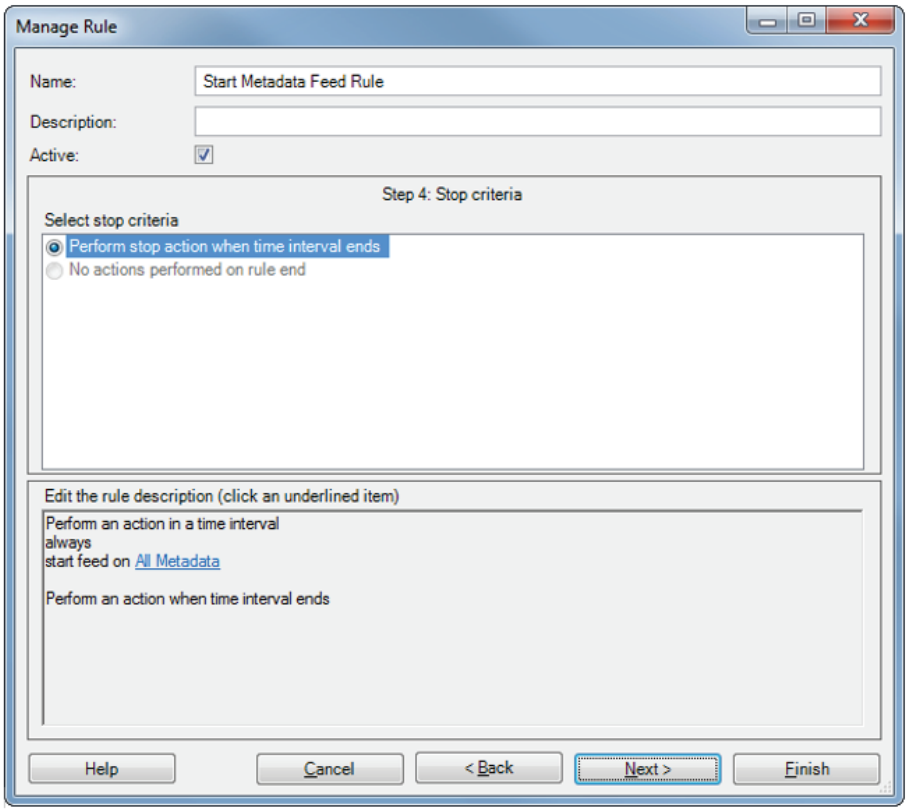
- Select **Start feed on <device>**, then click **recording devices**.



- Select **All Metadata** (or alternatively select a sub-set of the metadata input devices, according to your needs).
- Click **Add** and then click **OK**.



- In the **Manage Rule** window, click **Next**.
- Select **Perform stop action when time interval ends** and then click **Next** .



- Click **Finish**.

The XProtect system now correctly retrieves the metadata from AXIS Perimeter Defender and can show 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 replying a recorded sequence. To record them, you have to add a special rule in the management client. See *Activate metadata recording on page 27*.

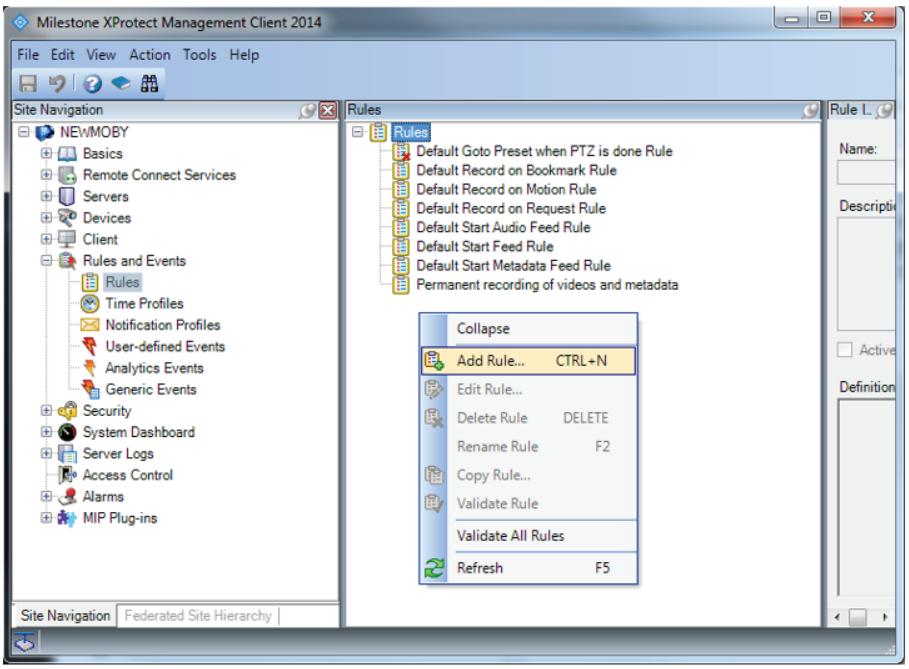
Important

The MIP Driver channels can be renamed if you want to, but the name **must always contain the "MIP Driver" keyword** for the Smart Client to find the correct association between them and the corresponding video stream.

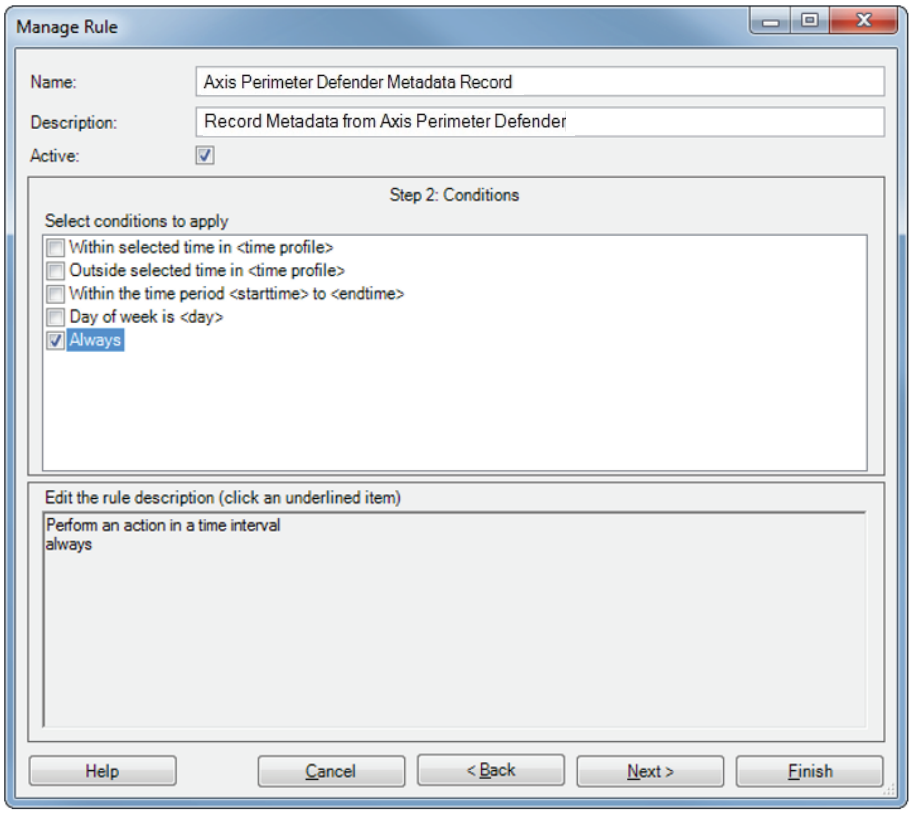
Activate metadata recording

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

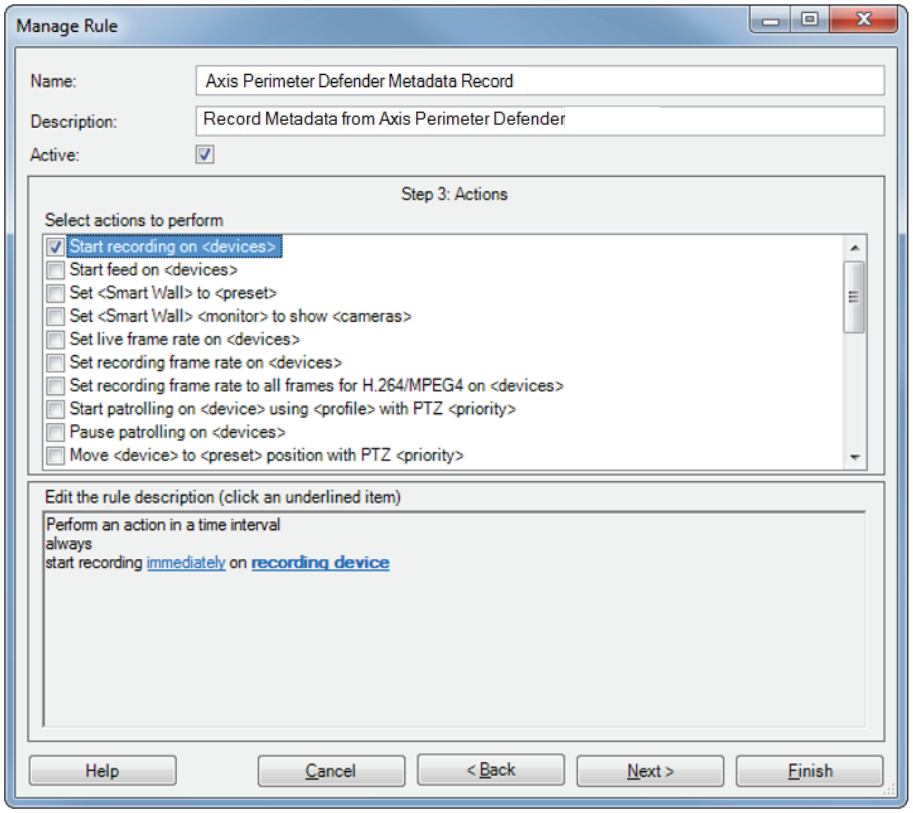
1. Open the Management Client.
2. Click **Rules and Events** and then **Rules**.
3. Right-click in the **Rules** window.



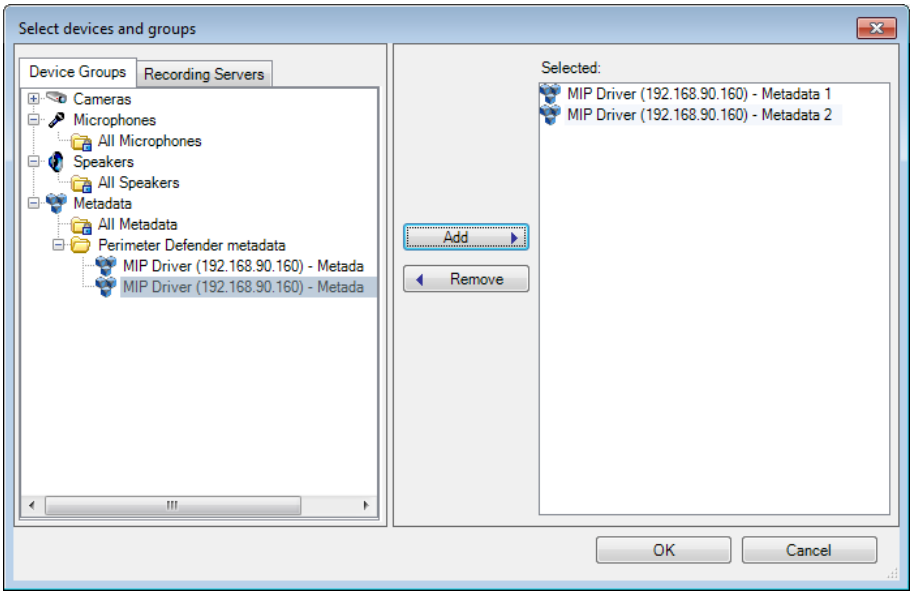
4. Select **Add Rule**.
5. Type a name and description for the new rule. Then select **Perform an action in a time interval** and click **Next**.
6. Select **Always** and click **Next**.



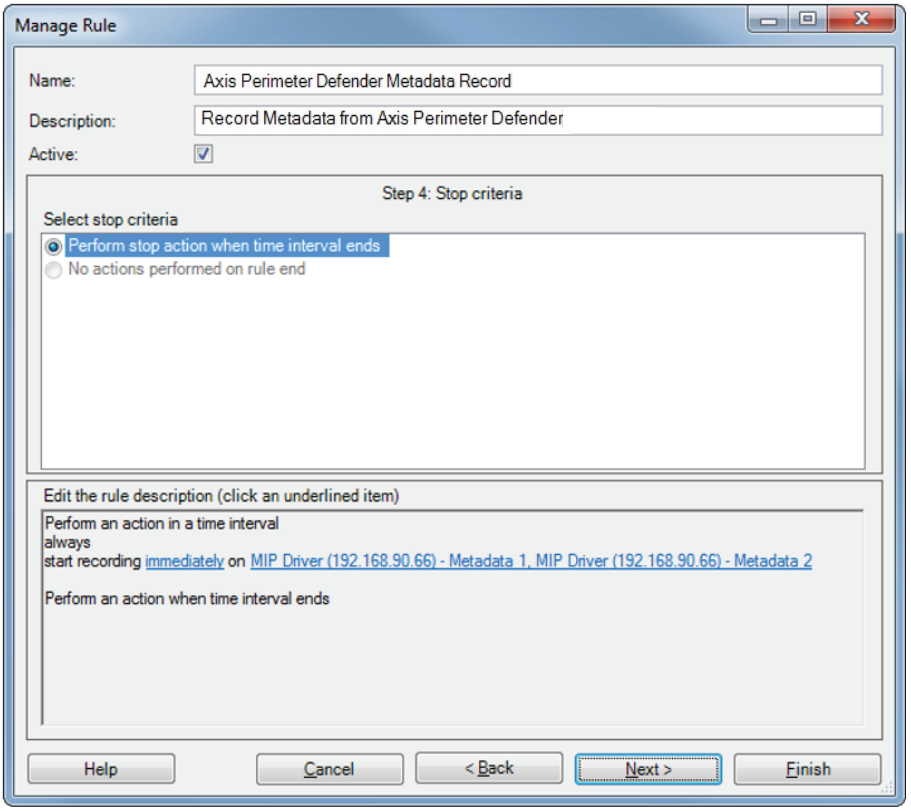
7. Select **Start recording on <devices>**, then click **recording device**.



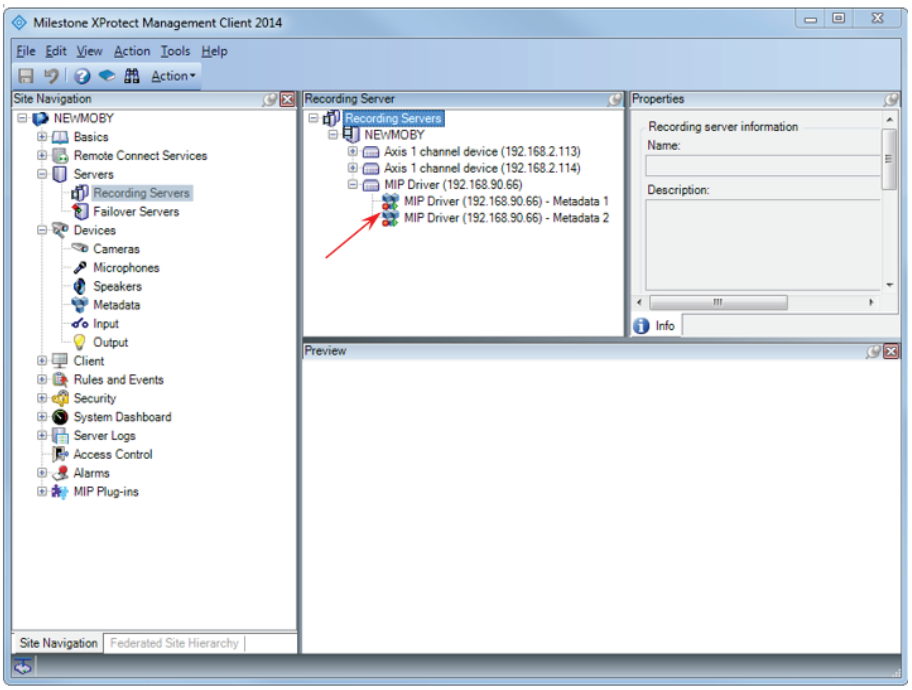
8. Select all the metadata channels and move them to the **Selected** panel by clicking **Add**.
9. Click **OK**.



10. In the manage rule window, click **Next**.
11. Select **Perform stop action when time interval ends** and click **Next**:



12. Click **Finish**.
13. To check that the metadata are correctly recorded, go to **Servers** > **Recording Servers**.
14. Expand your recording server, then expand the **MIP Driver** and check that the icon near the MIP Driver channels has a red square.



You might want to further tune this rule to, for example, only record the metadata when an event occurs. See the XProtect documentation on how to define and customize rules.

Important

To show 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.

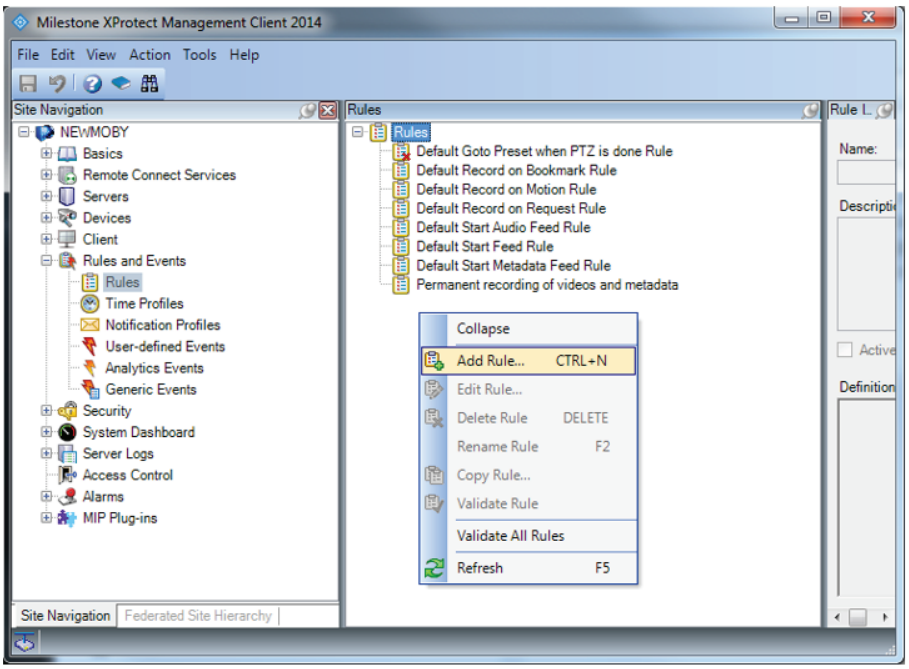
How to use trigger further actions

The User Defined Events and Analytics Events triggered by the AXIS Perimeter Defender Alarm and Metadata Bridge can be used to trigger further actions, more specifically:

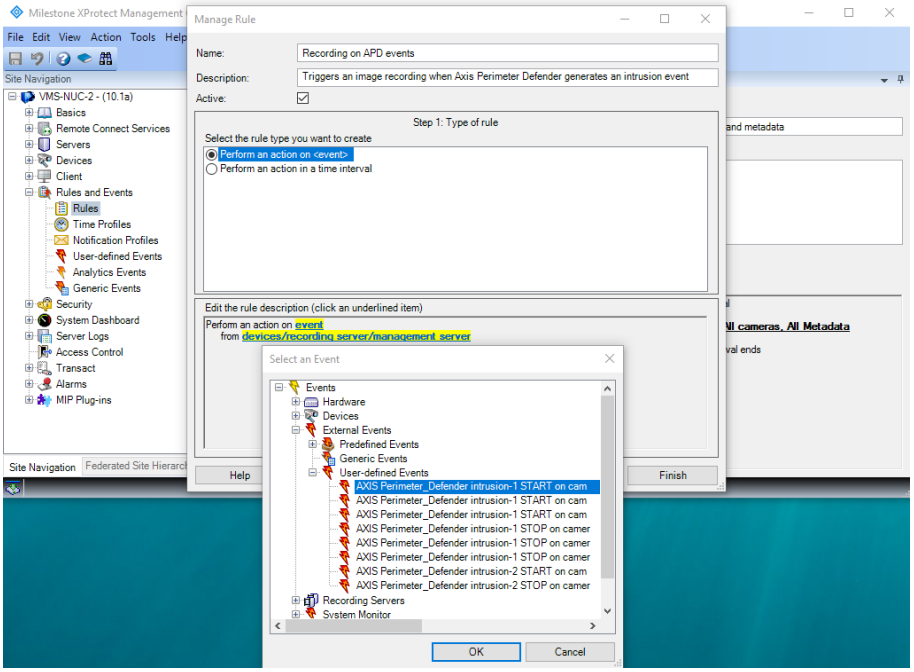
- Using the User Defined Events, specific rules can be used to:
  - Start image and metadata recording on alarms from AXIS Perimeter Defender or, in case a permanent recording is in place, to raise the quality, resolution and frame rate of the recording.
  - To send an email to specific recipients, containing images or videos from the camera that triggered the alarm.
  - To action a hardware output like a dry or wet contacts.
- Using the Analytics Event, a specific alarm can be triggered.

How to start image recording using User Defined Events

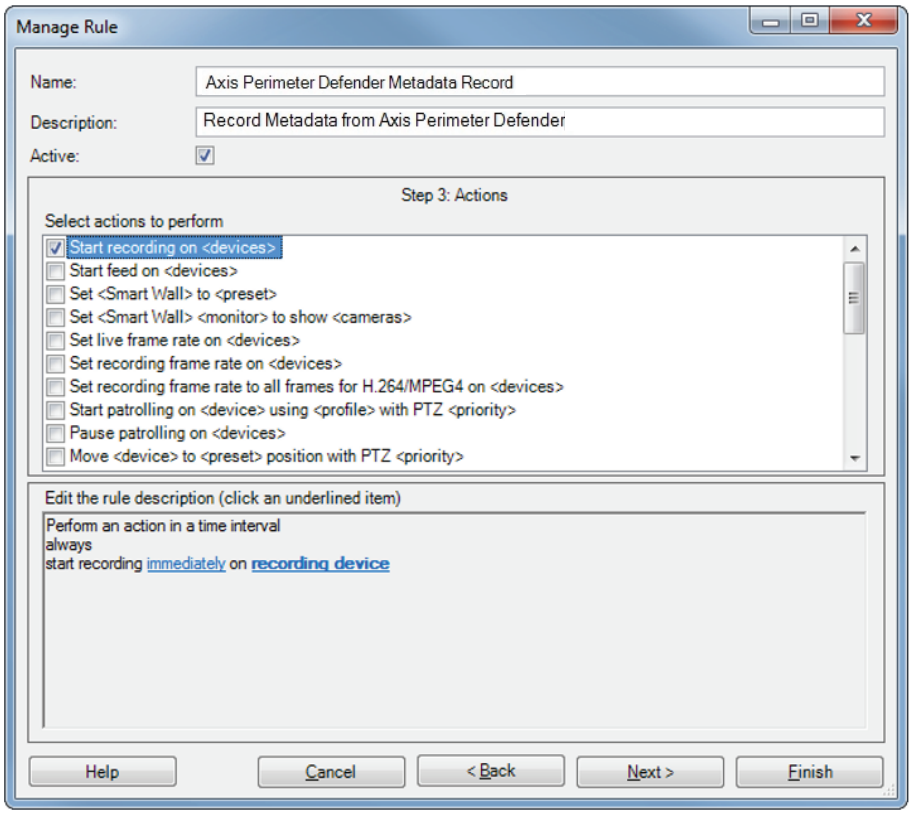
1. Select **Rules and Events**, then select **Rules**.
2. Right-click **Rule**.
3. Select **Add Rule...**.



4. Type a name and a description for the rule.
5. Select the rule type **Perform an action on event...**.
6. Click **event**.
7. Expand **User Defined Events**.
8. Select the event of interest.
9. Click **OK**.
10. Click **Next**.



11. If you want to, select an adapted time profile or click **Next**.



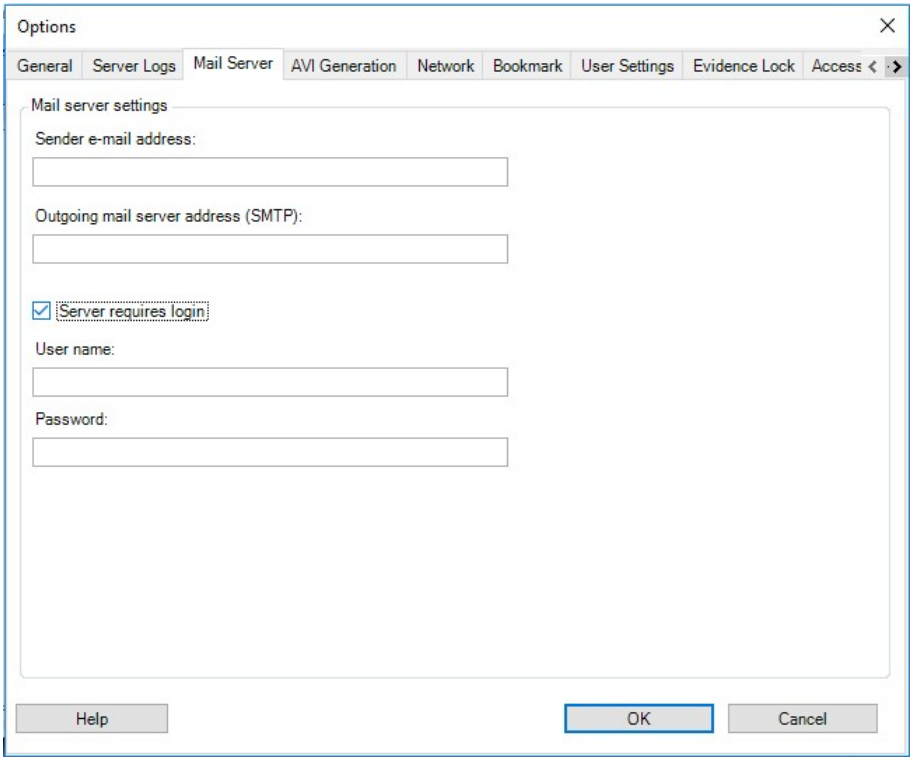
12. Select the action **Start recording on <devices>**

13. Click **Recording device** and select the associated cameras that you want to record on the selected User Defined Event.
14. Click **Next**.
15. If needed, repeat the same steps to define the action to perform on **Stop**. For example **stop the recording after 60 seconds**.
16. Click **Finish**.

How to send an email using User Defined Events

In order to be able to send an e-mail when AXIS Perimeter Defender triggers a specific User Defined Events, it is necessary to first define an smtp server and then a notification profile:

1. Go to **Tools** > **Options**.
2. Select the **Mail server** tab and enter the corresponding information.



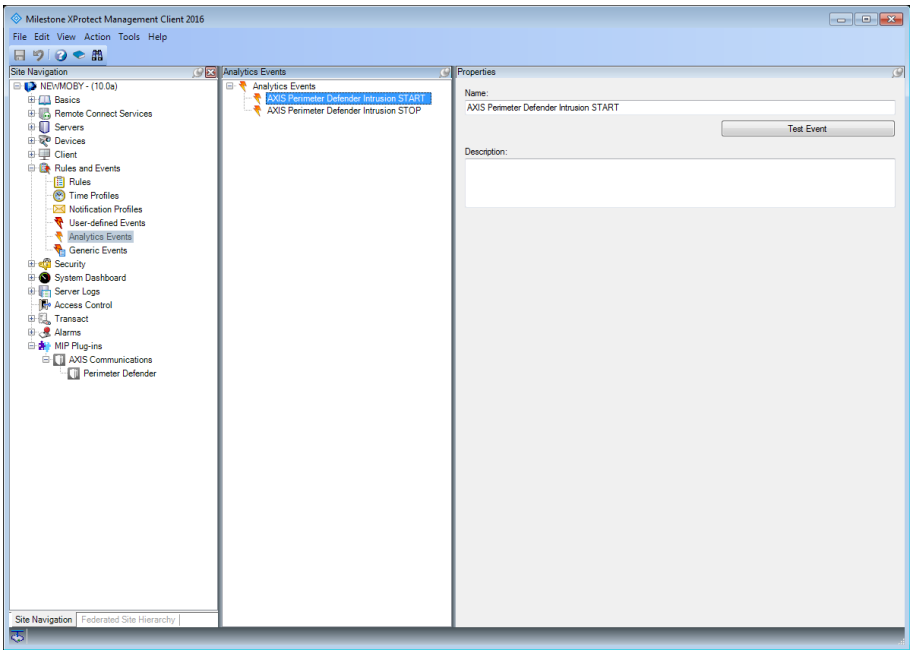
3. You have to provide a sender e-mail, the IP address or hostname of the SMTP server and, if it requires authentication, the username and password.
4. Click **OK**.
5. Click **Rules and Events**.
6. Click **Notification Profiles**.
7. Right-click **Notification Profiles** and then select **Add Notification Profile**.
8. Type a name for the new notification profile and an optional description, then click **Next**.
9. Customize the notification email and then click **Finish**.

Now you can define a rule that sends a notification using this profile. See *How to start image recording using User Defined Events on page 32*. As action to trigger, select **Send notification to <profile>** and select the email notification profile defined in this section.

How to trigger an alarm from an Analytics Event

Analytics Events can be used to trigger an alarm in the XProtect system. However, 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 the event is not defined, it will still be triggered if the option is selected. The Event Server and the Smart Client receive the event, but it is not possible to use it to trigger a further alarm.

1. Expand **Rules and Events**.
2. Click **Analytics Events**.
3. In the **Analytic Events** pane, right-click **Analytics Events** and click **Add New...**.

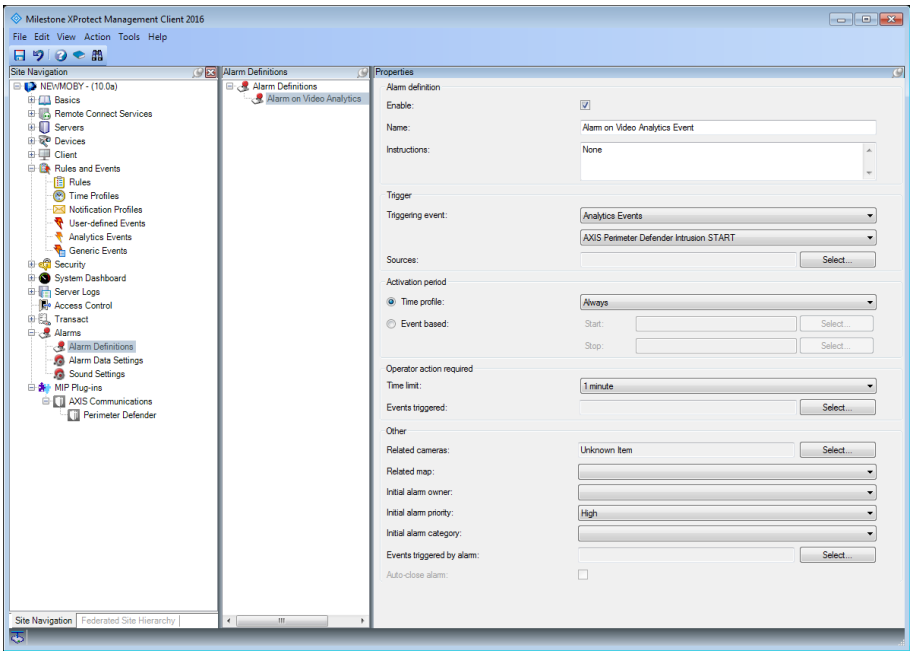


4. Type a name with the following syntax: "AXIS Perimeter Defender ALERT_TYPE START_STOP", where ALERT_TYPE is one of the following values: "Intrusion", "Loitering", "ZoneCrossing", "Conditional" and START_STOP is one of the following values: "START" or "STOP".

   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".

5. Optionally add a description to the Analytics Event.
6. Save the configuration.

Now the Analytics Event can be used to trigger an Alarm. You need to specify exactly which camera must generate the Analytics Event for the corresponding Alarm to be triggered, thus allowing to trigger different Alarms for different cameras.



For further details on how to define an Alarm, see the Milestone documentation.

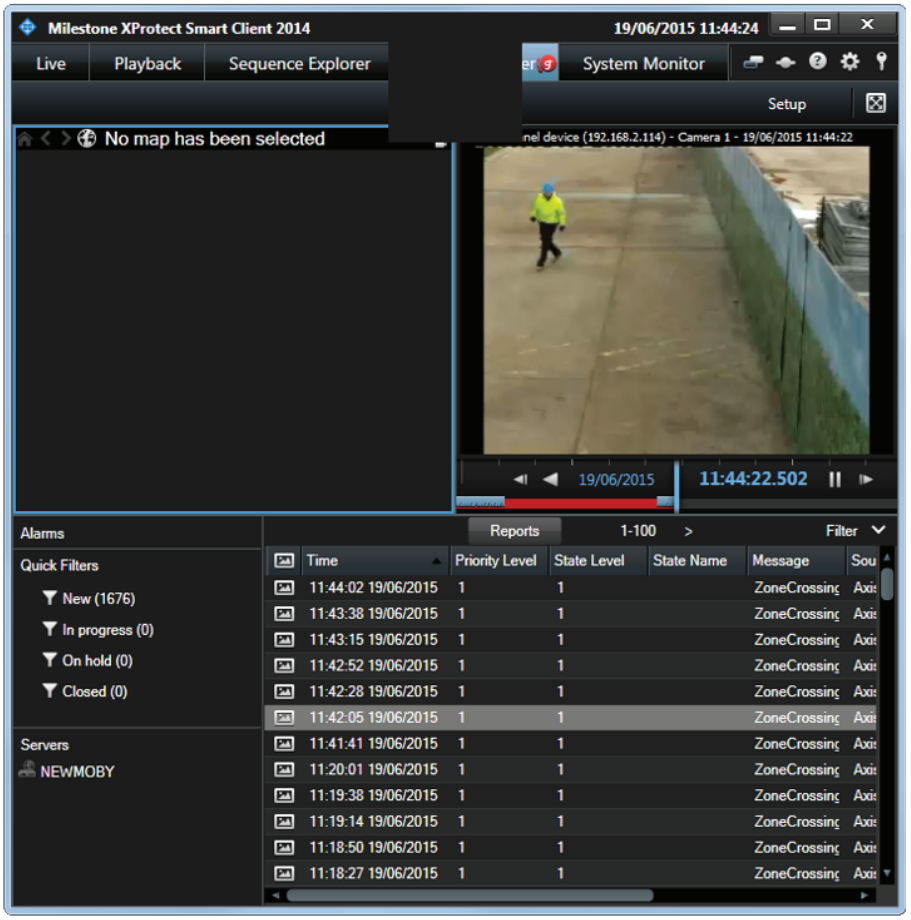
How to use the Smart Client

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

About alarms

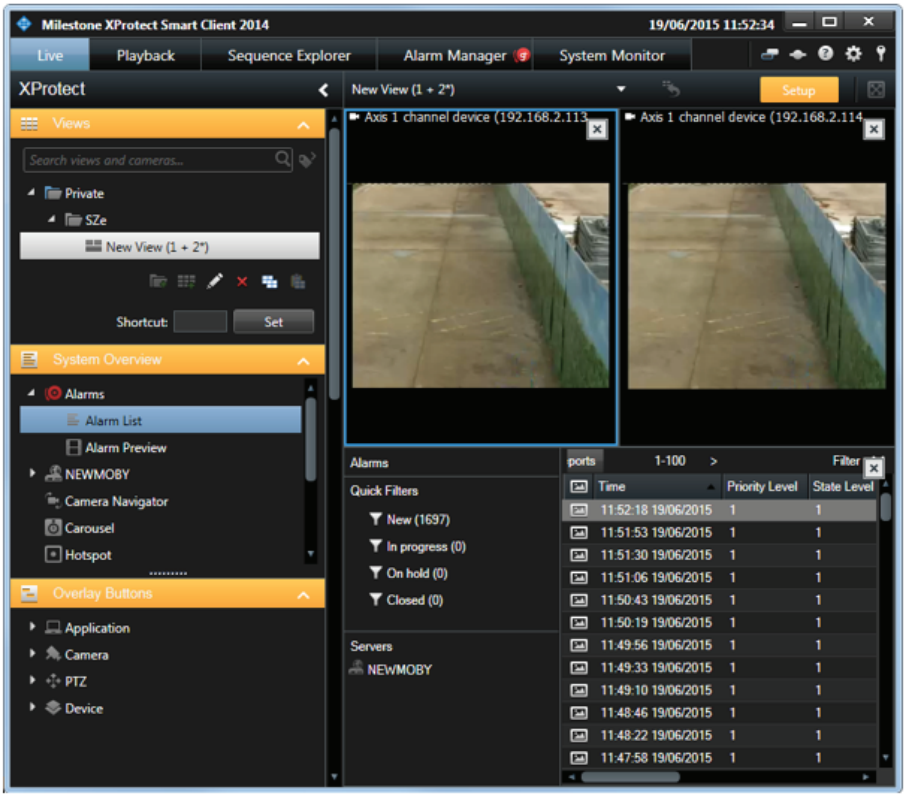
To view all alarms, go to **Alarm Manager**.

XProtect Corporate or Expert



To view the corresponding video sequence in the video player, click one of the alarm in the list.

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

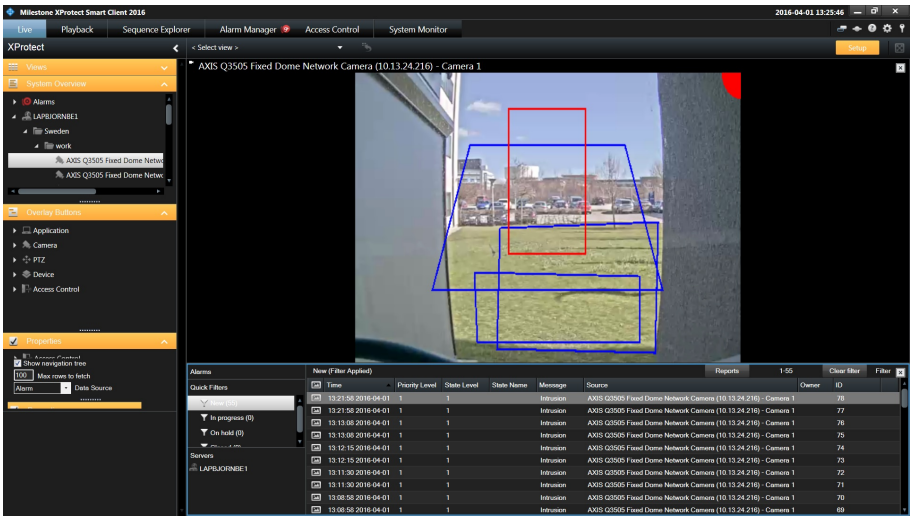


If you are not interested in alarm reception in the Smart Client, you can deactivate the automatic triggering of alarms by the AXIS Perimeter Defender Metadata Bridge by using the Configuration Tool. See *Software installation on the host running the XProtect Recording Server on page 8*.

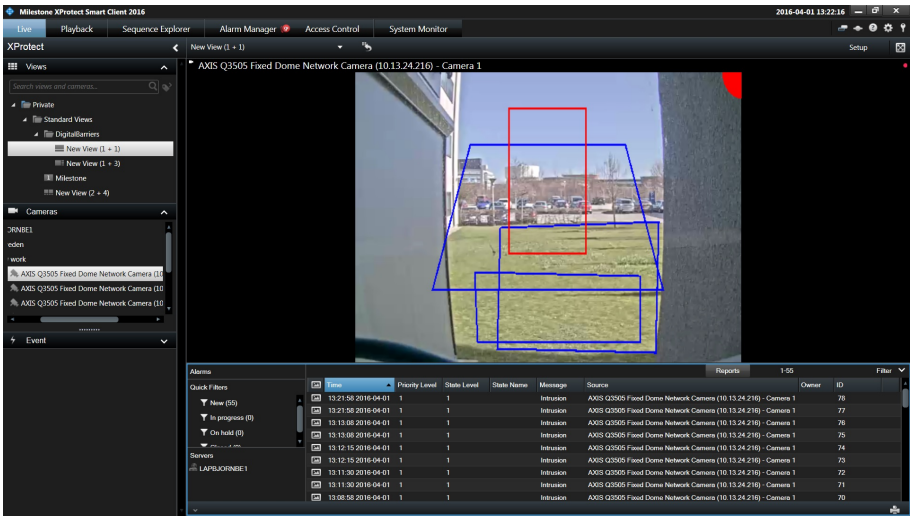
How to receive and monitor user-defined events

Once the necessary user-defined events have been set up, they can be received and monitored in the Smart Client.

1. Open the **Setup** mode.
2. Drag the **Alarm List** in a free tile.
3. Select the **Alarm List** tile.
4. In **Properties**, change the **Alarm** value of the combo box to **Event**:



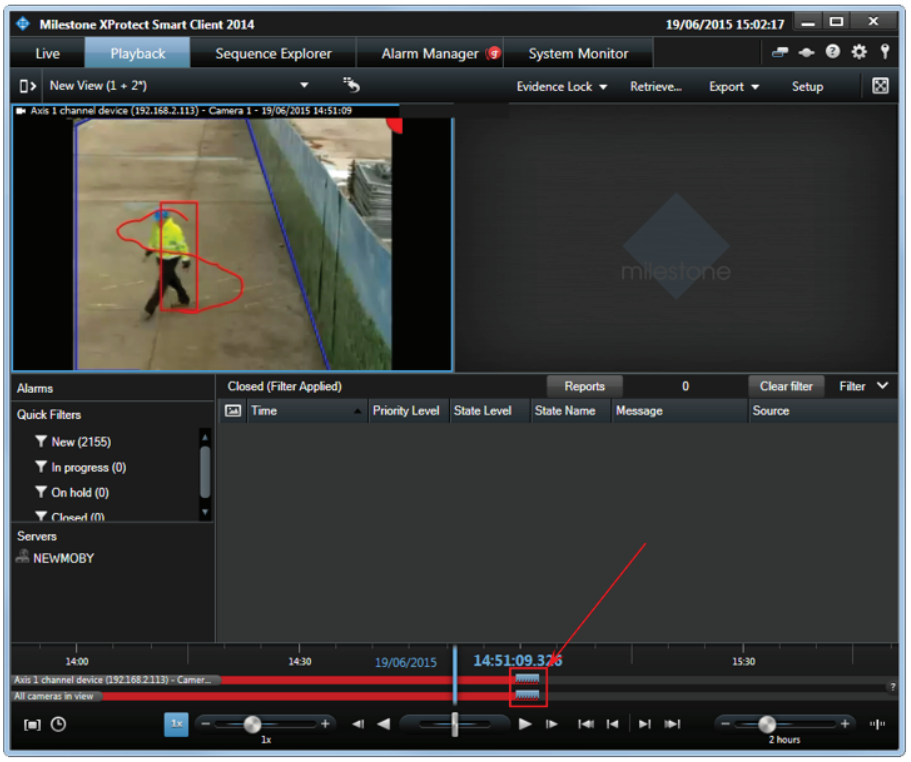
5. The events triggered by AXIS Perimeter Defender show up in the corresponding tile when you commute back from the **Setup** mode.



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

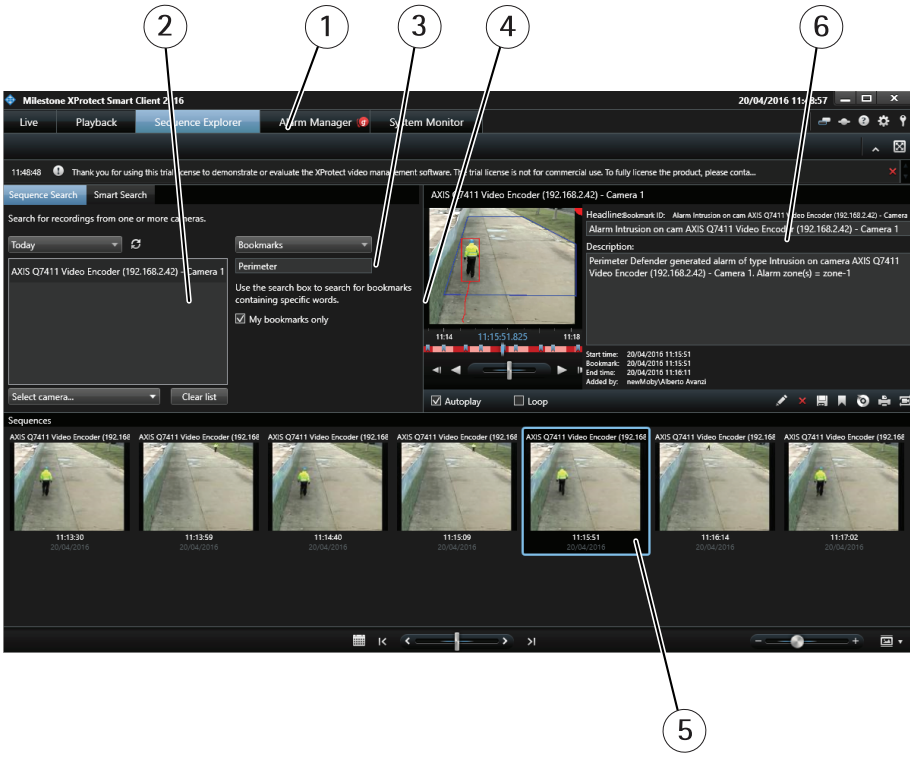
About bookmarks

If the 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.



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

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



1 *Sequence explorer tab*
2 *Cameras*
3 *Combo box*
4 *Search for string*
5 *Bookedmarked 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 shown in the lower pane.
6. The bookmark details are shown in the right pane, and the corresponding sequence with the metadata overlay is shown in the video player.

Metadata display

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

What a typical metadata looks like. In this screenshot the intrusion zone is shown.

1. The upper right corner of the image contains a colored spot, the color shows 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 shown in blue. In the previous screenshot (the one inside Security Desk) one camera shows an intrusion zone and the other the two zones of a Zone-crossing scenario
4. The approximate actor trajectory is shown in red (for a person) or blue (for a vehicle)

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

XProtect Enterprise/Professional/Express

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:

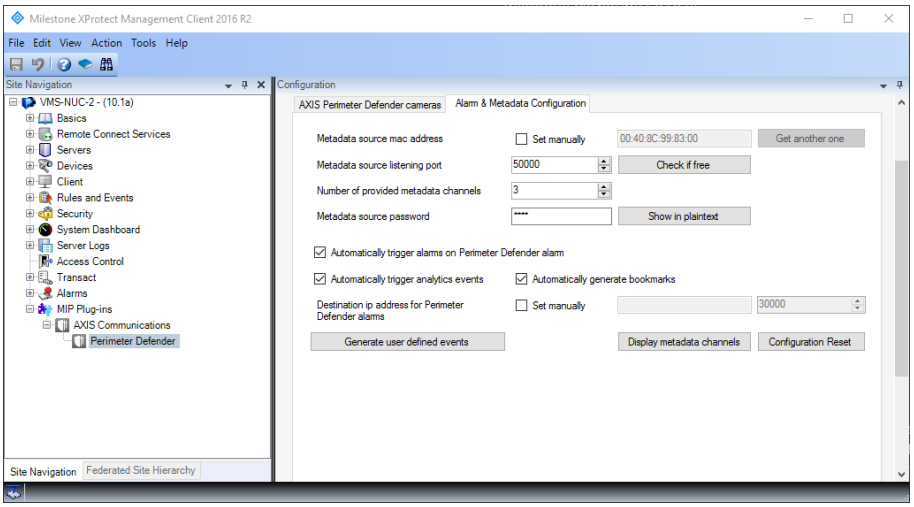
- You can scan the list of cameras defined within XProtect and automatically select those where AXIS Perimeter Defender is installed. See *Add Axis devices running AXIS Perimeter Defender to XProtect on page 10*.
- The plugin allows the user to deactivate the automatic generation of XProtect Alarms when an AXIS Perimeter Defender triggers an alarm (the alarm generation is activated by default)
- The plugin allows the user to deactivate the automatic generation of XProtect Analytics Events when an AXIS Perimeter Defender triggers an alarm (the Analytics Events is activated by default).

Alarms and Analytics events 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.

1. Open the Management client, and add to the XProtect system all the cameras you need. You need to add both the Axis devices running AXIS Perimeter Defender and the video devices whose video stream is analyzed by AXIS Perimeter Defender
2. Go to **MIP Plugins** > **AXIS Communications** > **Perimeter Defender**.
3. Click the **Alarm & Metadata configuration** tab.
4. If you want to automatically trigger an XProtect alarm when AXIS Perimeter Defender generates one, select **Automatically trigger alarms on Perimeter Defender alarm reception**.
5. If you want to automatically trigger an XProtect Video Analytics Event when AXIS Perimeter Defender generates an alarm, select **Automatically trigger analytics events**.
6. In most of the cases, you don't need to manually specify the destination IP address and listening port for alarms (i.e., the port that the AXIS Perimeter Defender Alarm & Metadata Bridge uses to listen for incoming alarms from AXIS Perimeter Defender and its IP address as used by the AXIS Perimeter Defender instances to send alarms). In some special cases, for example when there is a NAT or port forwarding between the AXIS Perimeter Defender devices and the host where the Alarm Metadata bridge runs, you might want to set them manually. In this case enter the **Metadata source mac adress** and **Metadata source listening port** that the AXIS Perimeter Defender devices should use to send their alarms to the Alarm & Metadata.
7. **Configuration Reset** drops the current configuration and restarts with a new configuration from scratch.
8. Save the changes by clicking the button.



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

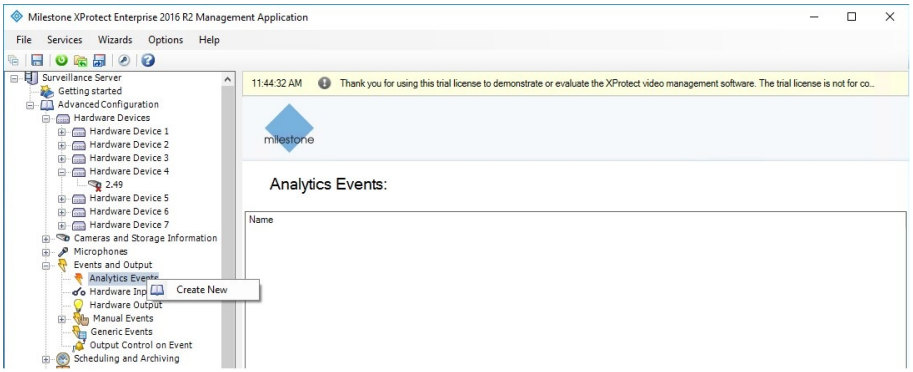
9. When saving a new configuration, the AXIS Perimeter Defender Alarm & Metadata Bridge is automatically restarted.

How to use Analytics Events to trigger alarms

Analytics Events can be used to trigger an alarm in the XProtect system. 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 selected, and as such, the Event Server and the Smart Client will receive them, but it will not possible to use it to trigger a further alarm.

To define an Analytics Event, do the following:

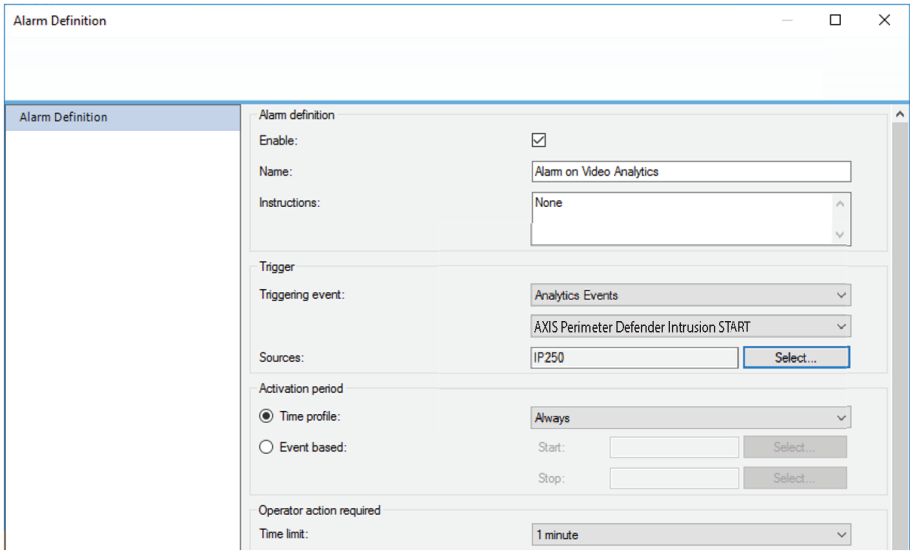
1. Click **Events and Outputs** in the left pane and then right-click **Analytics Events**.
2. Click **Create New**.



3. Enter a name for the Analytics Event with the following syntax: "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"
4. Optionally add a description to the Analytics Event.

5. Save the configuration.

Now the Analytics Event can be used to trigger an Alarm. You can specify exactly which camera must generate the Analytics Event for the corresponding alarm to be triggered, thus allowing to trigger different alarms for different cameras.



For further details on how to define an alarm, see the Milestone documentation.

How to use Manual Global Events to trigger further actions

It is possible to define Manual Global Events that are associated to specific cameras, AXIS Perimeter Defender scenarios, and scenario types (start/stop). The advantage of Manual Events is that they in turn can trigger specific actions like send emails, send text messages, or trigger hardware outputs.

The AXIS Perimeter Defender Alarm & Metadata Bridge automatically looks for defined Manual Global Events that respect a certain format and if it finds them, it triggers automatically those satisfying the alarm conditions. It is for example possible to define:

- a Manual Event that is triggered on every alarm START from any camera
- a Manual Event that is triggered on every alarm START of a specific camera
- a Manual Event that is triggered on a specific scenario of a specific camera
- any combination of the previous three

Every Manual Global Event that is supposed to be triggered on an AXIS Perimeter Defender alarm must have a name that respects a specific format: "AXIS Perimeter Defender <ScenarioName> <ScenarioName> <ScenarioType> on camera <CameraName>" where:

- <ScenarioName> is the name of the scenario as defined in the AXIS Perimeter Defender user manual. Usually it looks like "Intrusion-1", but can be customized at configuration phase through the AXIS Perimeter Defender Setup. If you want the Manual Global Event to be triggered by any scenario, use "ALL" as <ScenarioName>
- <ScenarioType> is either "START", "STOP" or "ALL". Use "ALL" if you want the Manual Global Event to be triggered for both START and STOP alarms
- <CameraName> is the name of the camera as defined in XProtect. When AXIS Perimeter Defender triggers an alarm, it does so by analyzing images from a device that must also be present in XProtect. For AXIS Perimeter Defender, this is the device where AXIS Perimeter Defender is installed. <CameraName> is the name of the associated XProtect Camera. Use "ALL" if the Manual Global Event must be triggered by AXIS Perimeter Defender alarms associated to any XProtect camera. If you want to use an XProtect Camera Name as <CameraName>, replace any space of the XProtect

NOTICE

Camera Name with the underscore ('_') character in the Manual Global Event name. For example, if the camera is named "Right Entrance Camera", use "Right_Entrance_Camera" as <CameraName>. Alternatively, rename the XProtect Camera Name to remove any space.

NOTICE

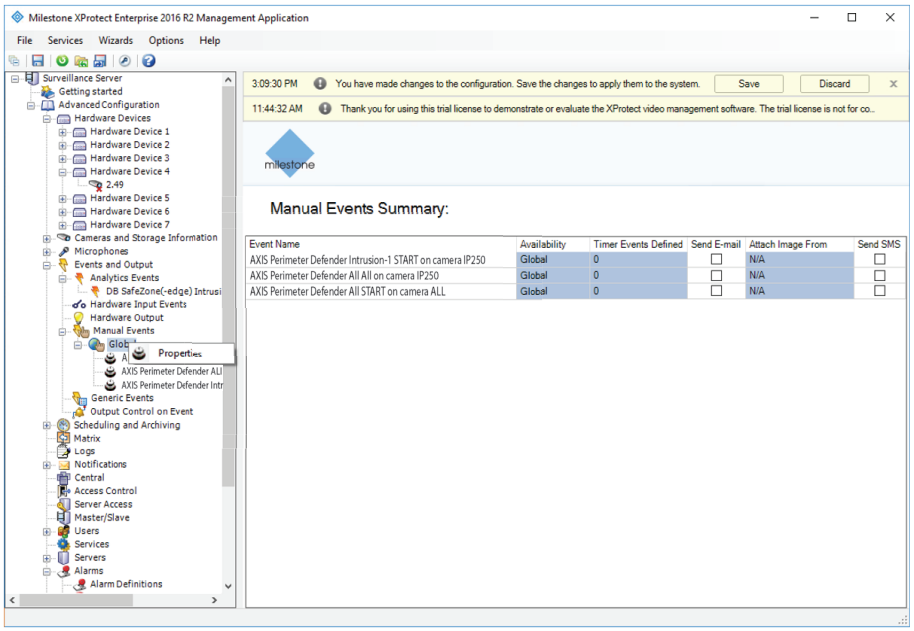
The three parameters <ScenarioName>, <ScenarioType>, <CameraName> are all case insensitive, so lowercase and uppercase letters are considered the same.

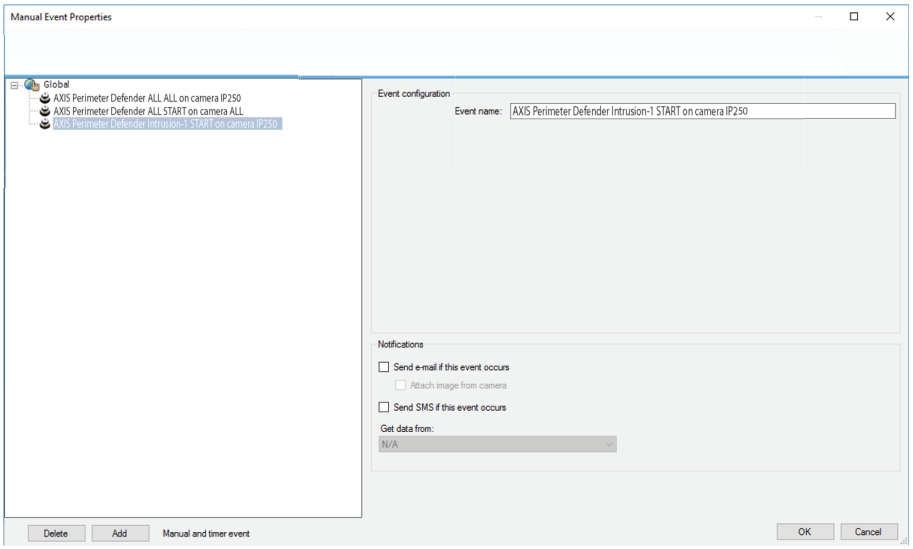
Here are some examples of Manual Global Events and by which AXIS Perimeter Defender alarms they will be triggered:

- "AXIS Perimeter Defender Intrusion-1 START on camera ALL": will be triggered by any AXIS Perimeter Defender alarms START related to a scenario called "Intrusion-1" from any camera
- "AXIS Perimeter Defender ALL ALL on camera IP250": will be triggered by any AXIS Perimeter Defender alarm START or STOP related to any scenario from the XProtect Camera "IP250"
- "AXIS Perimeter Defender ALL START on camera ALL": will be triggered by any AXIS Perimeter Defender alarm START related to any scenario from any camera
- "AXIS Perimeter Defender ZoneCrossing-1 STOP on camera IP250": will be triggered by any AXIS Perimeter Defender alarms STOP related to the scenario "ZoneCrossing-1" from XProtect camera "IP250"

To define a new Manual Global Event, do the following:

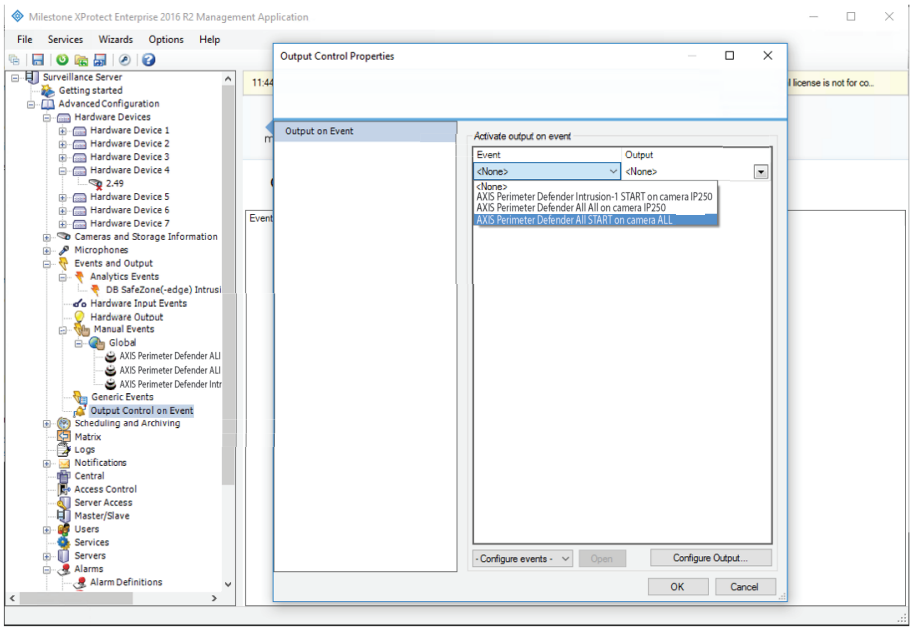
1. Expand **Events and Outputs**.
2. Expand entry **Manual Events**.
3. Right-click **Global**.
4. Click **Properties**.





5. Select **Global**.
6. Click **Add**.
7. Enter the **Even Name**.
8. Optionally select **Send e-mail if this event occurs**. See *How to use Manual Global Events to send an email on page 49*.
9. Optionally select **Send SMS if this event occurs**. See *How to use Manual Global Events to send an email on page 49*.
10. Click **OK**.

Now you can use the Manual Global Event to trigger a Hardware Output.



1. Go to **Events and Outputs**.

2. Right-click **Output Control on Event**, then click **Properties**.
3. Select the **Manual Global Event** of interest.
4. Select the **Output Hardware** you want to activate.
5. Click **OK**.

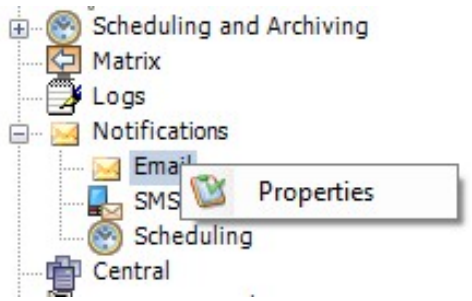
NOTICE

When you change the Manual Global Events names you must restart the AXIS Perimeter Defender Alarm & Metadata Bridge service for the changes to take effect.

How to use Manual Global Events to send an email

First you need to configure the email notifications.

1. Click **Notifications**.
2. Right-click **Email** and select **Properties**.

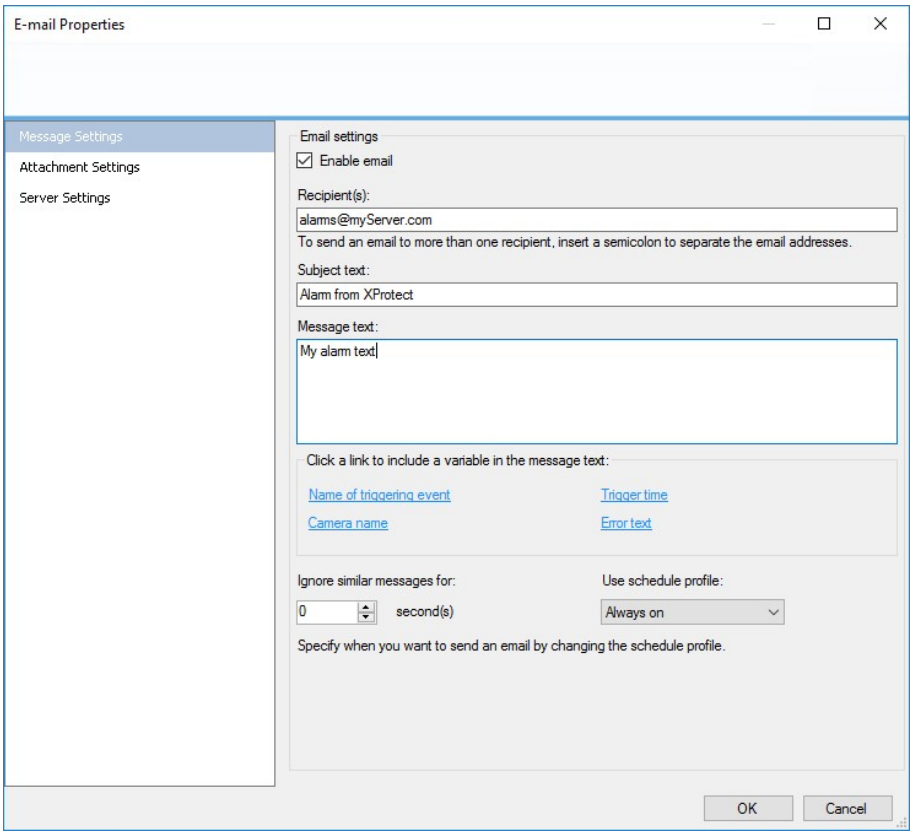


3. Select **Message Setting**.
4. Select **Enable email**.
5. Enter the recipient(s) field, the subject and the message.
6. If you want, select **Attachment settings** and configure the attachment.

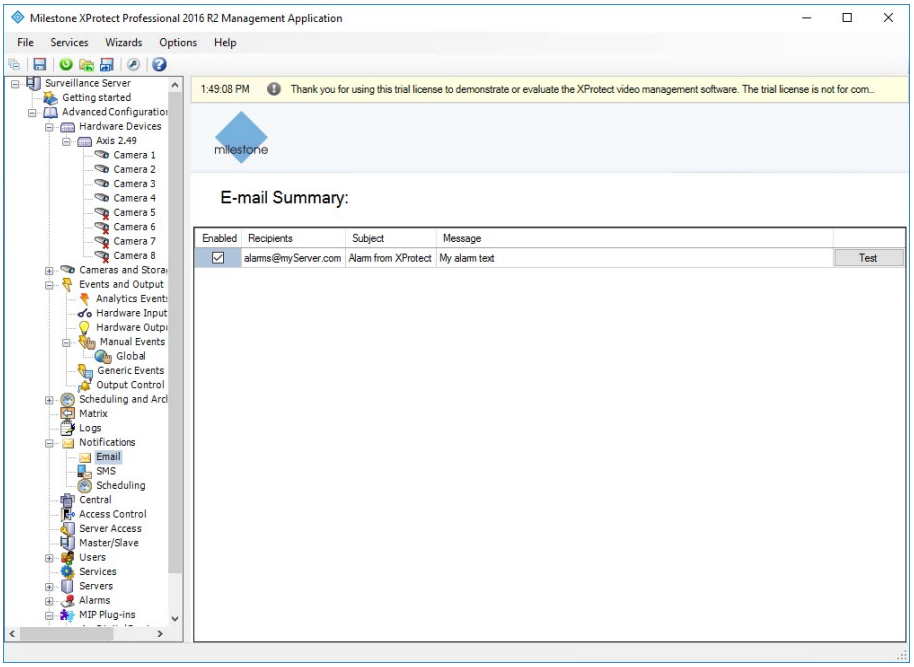
Important

Do not select **Embed images in email**. If you do, the email will not be sent. Select **Include images** and set the image properties.

7. Select **Server settings** and configure the server parameters, then click **OK**.



8. Save the XProtect configuration.



9. To test the parameters, click **Test**.

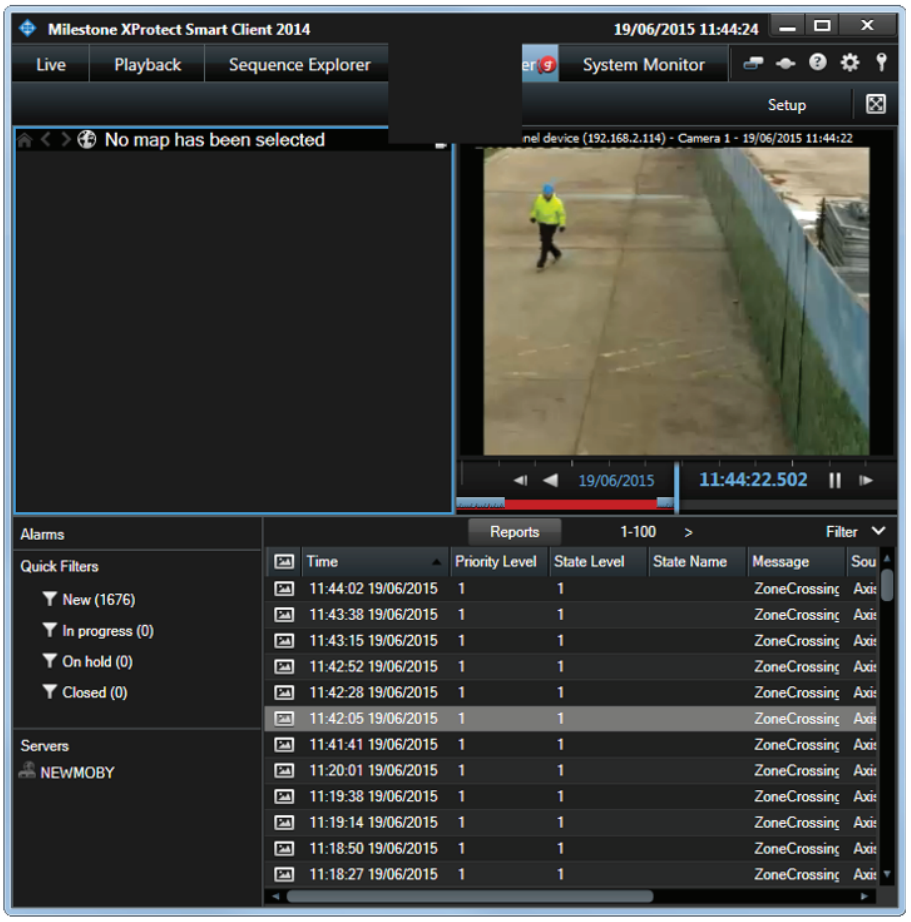
10. To activate the emails, go to *How to use Manual Global Events to send an email on page 49*.
11. If you want, you can attach email from a chosen camera. This only works if you've configured the **Attachment** part of the email notifications.
12. Click **OK**.
13. Save the XProtect configuration.

How to use the Smart Client

This section describes how to receive the alarms and the Manual Global events and use them in the Smart Client. For a more detailed description of the Smart Client, see the Milestone documentation.

About alarms

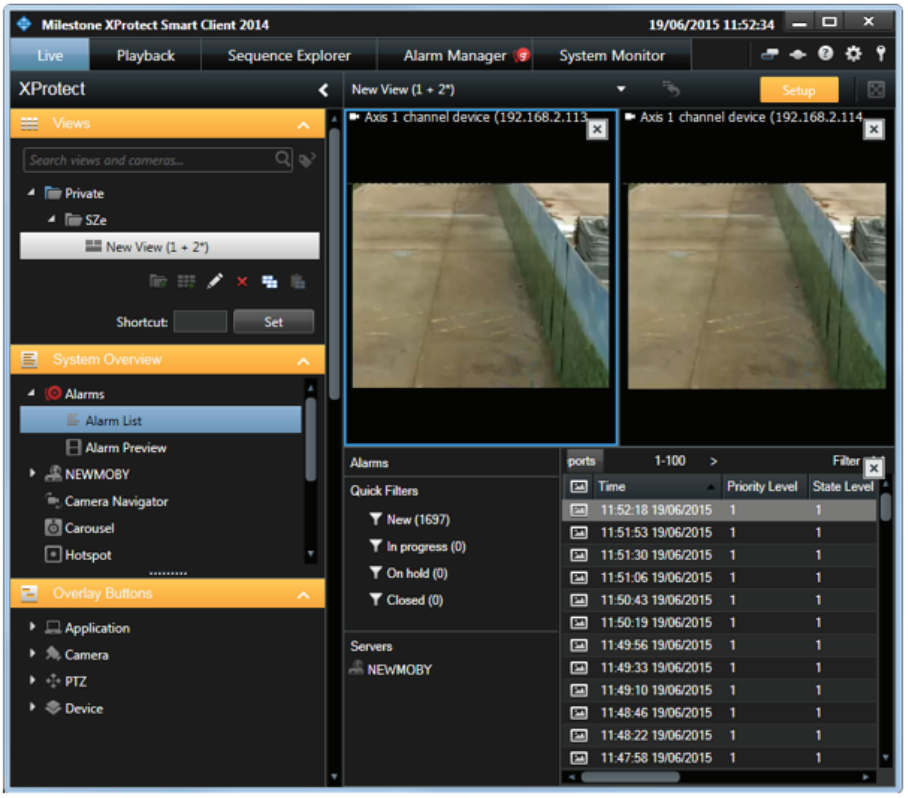
To view all alarms, go to **Alarm Manager**.



To view the corresponding video sequence in the video player, click one of the alarm in the list.

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

XProtect Enterprise/Professional/Express



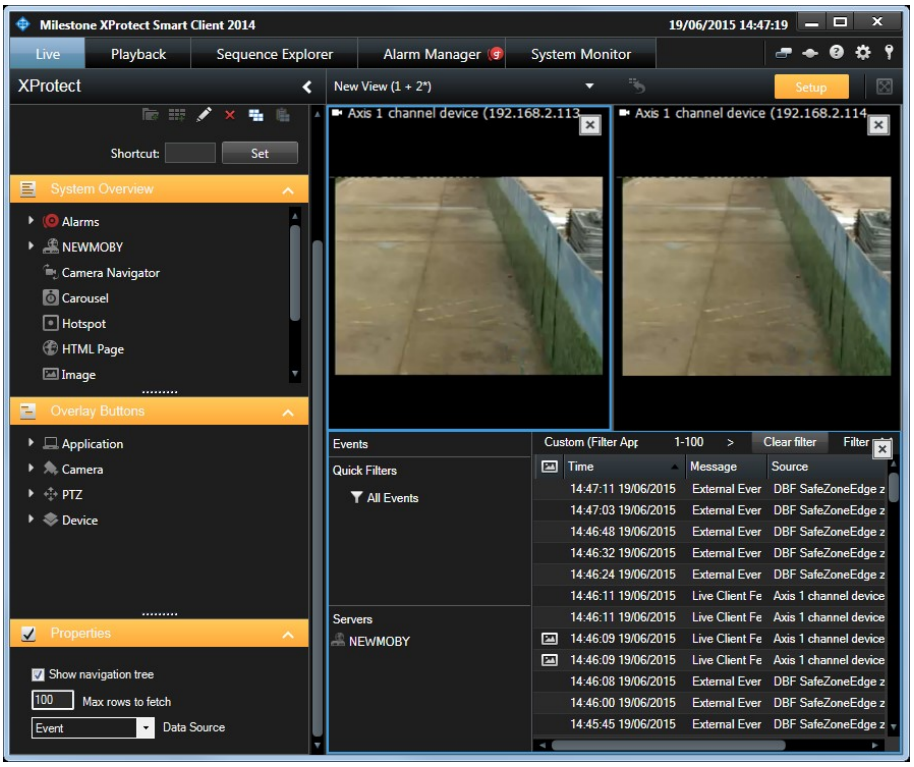
If you are not interested in alarm reception in the Smart Client, you can deactivate the automatic triggering of alarms by the AXIS Perimeter Defender Metadata Bridge by using the Configuration Tool. See *Software installation on the host running the XProtect Recording Server on page 8*.

Manual global events

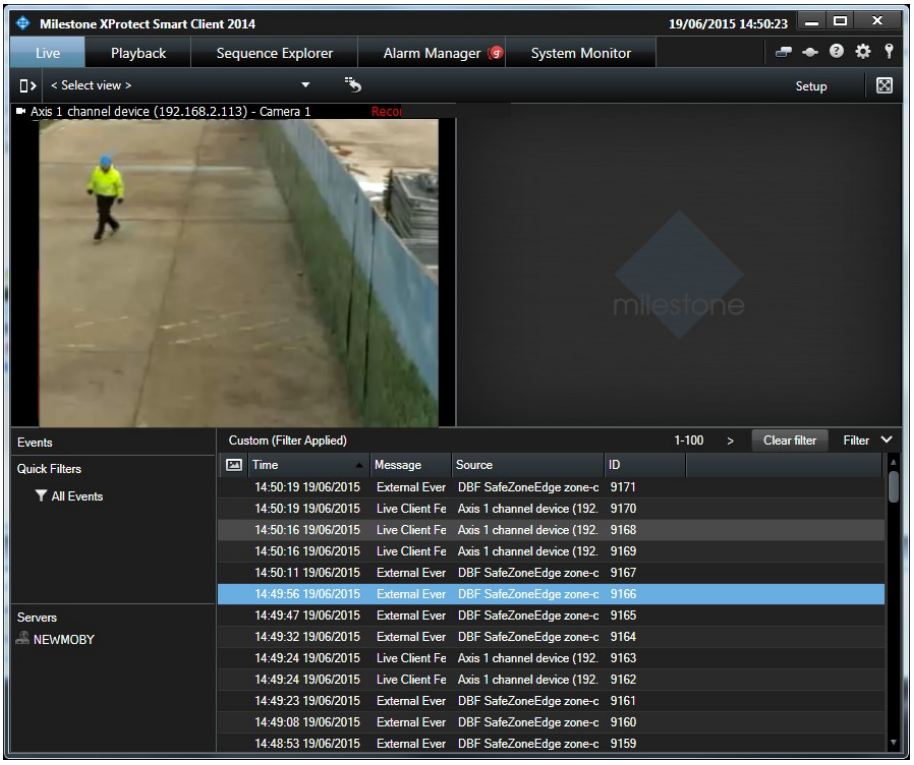
Once the necessary Manual Global Events have been defined, they can be received and monitored in the Smart Client.

1. Commute in the **Setup** mode.
2. Drag the **Alarm List** to a free tile.
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**.

XProtect Enterprise/Professional/Express



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

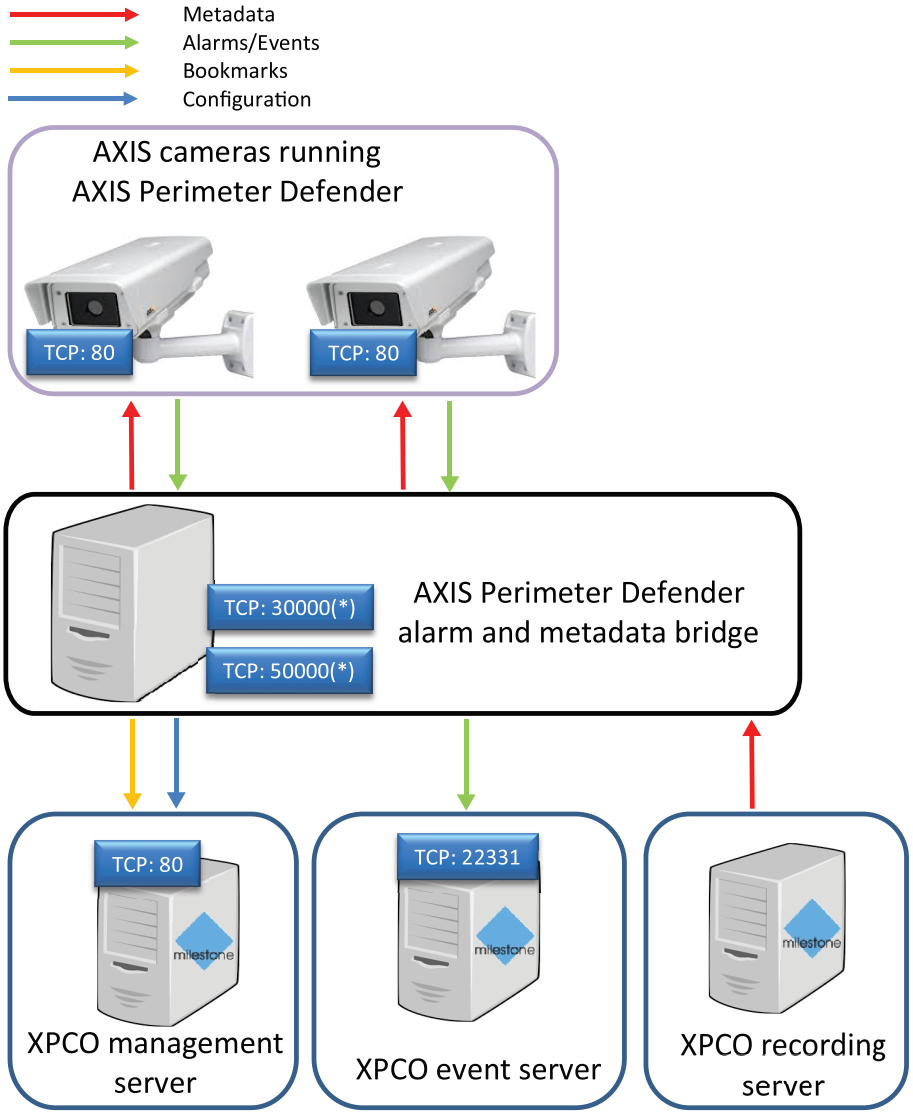


6. In the **Alarm Manager** tab, you can also switch from **Alarms** to **Manual Global Events** by following the same procedure.

Advanced configuration

Network communications

This section describes the network communications between the different logical modules composing a complete system.



This image illustrates the architecture of a complete system from a network point of view.

- XPCO management server, event server and recording server are shown on different physical servers, but they can be installed on a single one.
- The AXIS Perimeter Defender alarm and metadata bridge is shown as a separate server, but can be installed on the XPCO host as well.
- The AXIS Perimeter Defender alarm and metadata bridge receives the alarms from AXIS Perimeter Defender on its TCP/IP listening port 30000. It then transmits the alarms to the XPCO Event Server on its port 22331.

- When an alarm finishes, a bookmark is sent to the XPCO Management Server, on its port 80.
- The AXIS Perimeter Defender alarm and metadata bridge connects to AXIS Perimeter Defender and retrieves the metadata stream. It then implements an MIP Driver listening on port 50000 where the XPCO Recording server connects to get the metadata of the different "channels" that the MIP Driver implements.
- The AXIS Perimeter Defender alarm and metadata bridge stores its configuration in the XPCO Management Server.

How to add new video sources to the system

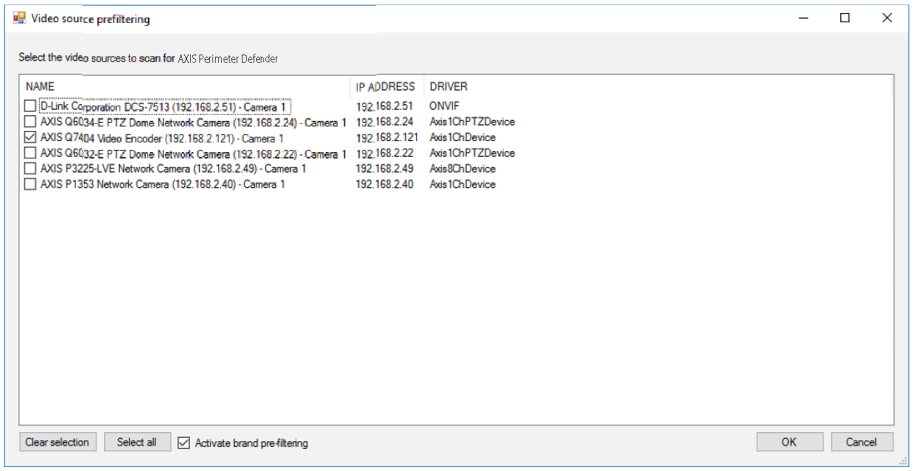
When adding a new video source, you need to first configure the video source with the XProtect System. This step is covered by the Milestone XProtect User Guide. The next steps depend on the type of video source added and on the XProtect product.

How to configure an Axis device with AXIS Perimeter Defender

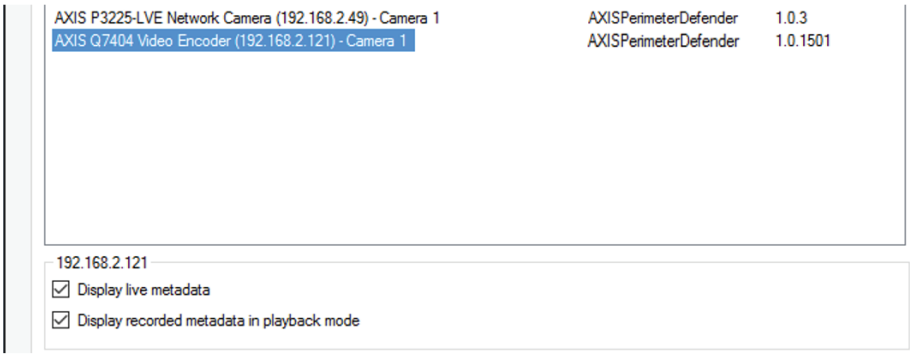
In the following instructions, the video source "AXIS Q7404 Video Encoder (192.168.2.121) – Camera 1" has recently been added to the system.

Once the new video source has been added, follow these steps:

- Configure the AXIS Perimeter Defender installed on the device and start the application.
- In the **AXIS Perimeter Defender cameras** tab, click **Scan new cameras** and, if the pre-selection steps is chosen, make sure that the new devices are selected.

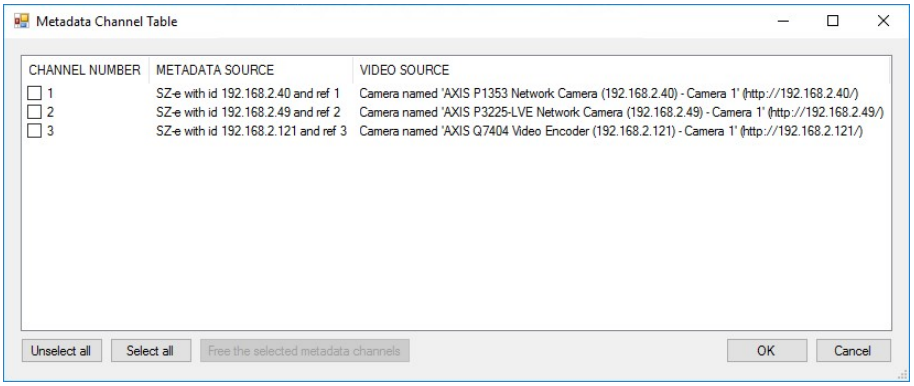


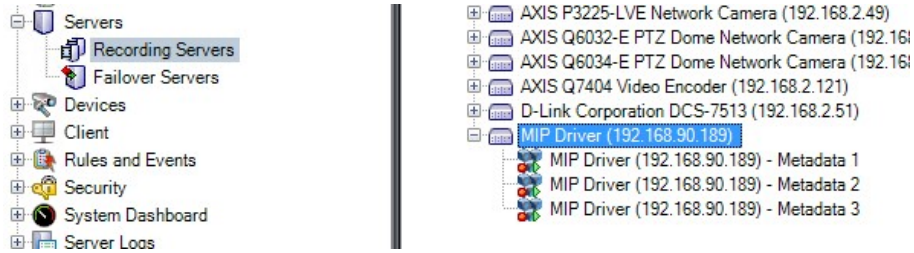
Only valid for XProtect Corporate/Expert: Once the scan has finished, select the new devices one by one and set the **Display live metadata** and **Display recorded metadata in playback mode** options.



In the **Alarm & Metadata Configuration** tab, click **Generate user-defined events** if you plan to use them, and then save the configuration with Ctrl+S.

Only valid for XProtect Corporate/Expert: Consider if you need to replace the MIP Driver device within the XProtect system, see *How to increase the number of channels of the MIP Driver on page 57*. In any case, display the channel table using the **Display metadata channels** button in the **Alarm & Metadata Configuration** tab and make sure that the metadata channel associated to the new device is enabled on the MIP Driver device.

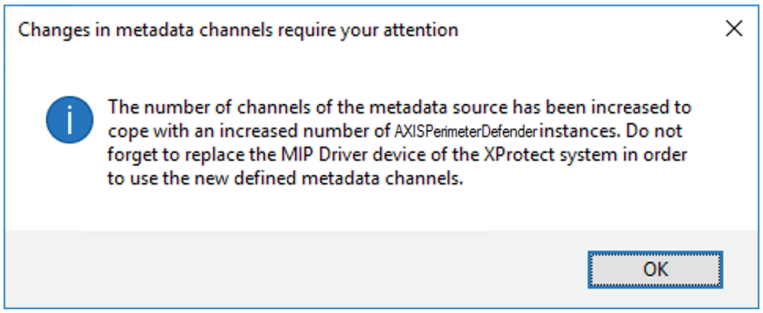




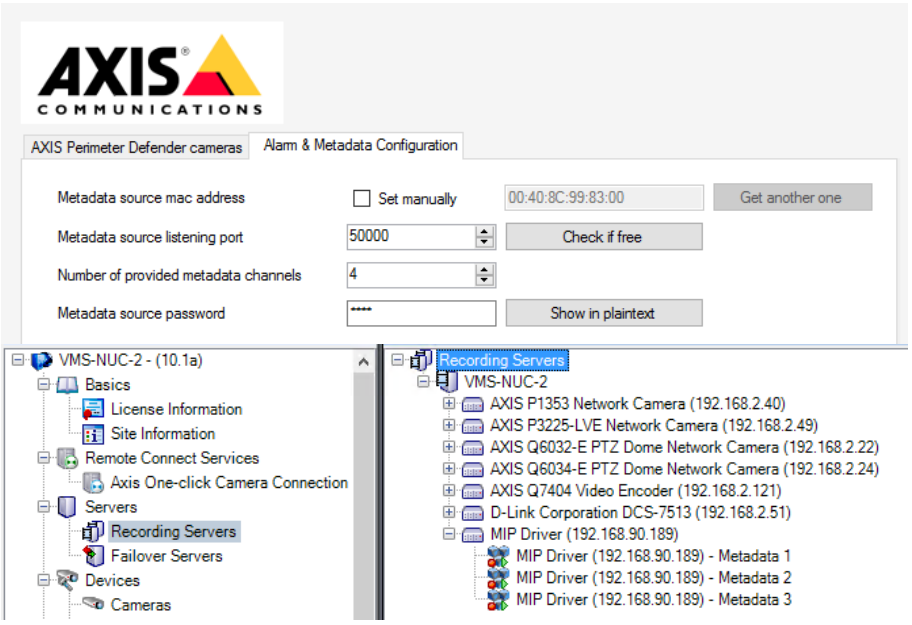
How to increase the number of channels of the MIP Driver

The MIP Driver device that sends the metadata streams to XProtect must be replaced if the number of channels it presented when added to XProtect the very first time is smaller than the number of AXIS Perimeter Defender instances sending metadata to XProtect.

Usually you need to replace the MIP Driver device when the number of video sources analyzed by AXIS Perimeter Defender is higher than the metadata channels provisioned at the first installation. When this happens, you get the following message.



To check if you need to replace the MIP Driver device, compare the value of the **Number of provided metadata channels** field with the actual number of metadata channels of the MIP Driver device.

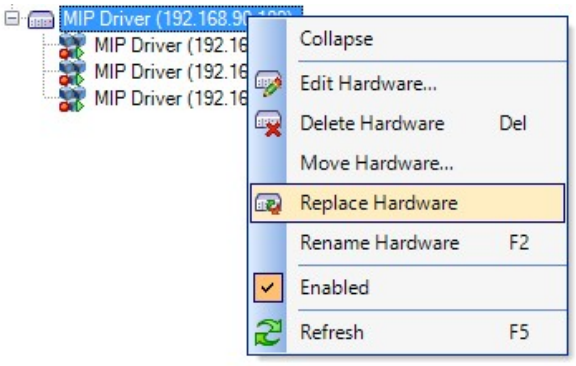


In this example, the MIP Driver device must be replaced in order to obtain the 4 metadata channels provided by the metadata source.

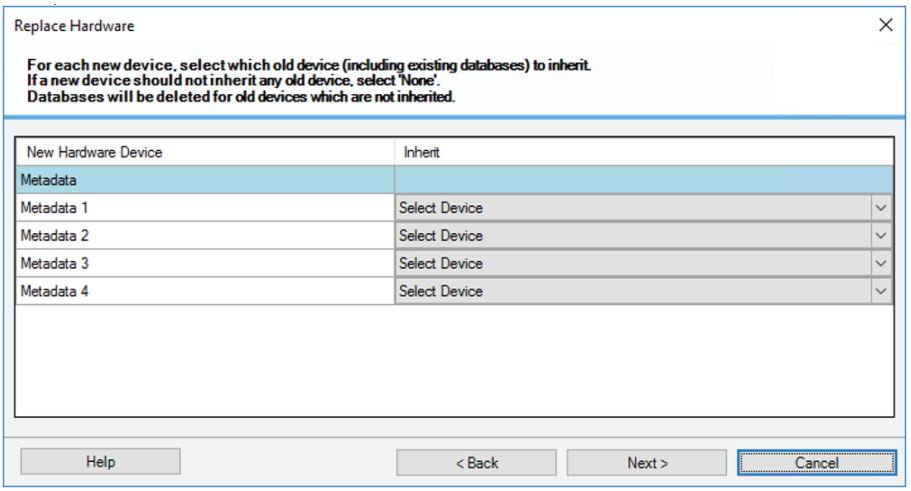
Select one of the following options:

- Remove the MIP Driver device and then add it again. Note that all the previously recorded metadata on all channels are lost.
- To keep the existing recorded metadata, use the function **Replace hardware**.

1. Right-click the MIP Driver device and click **Replace Hardware**.

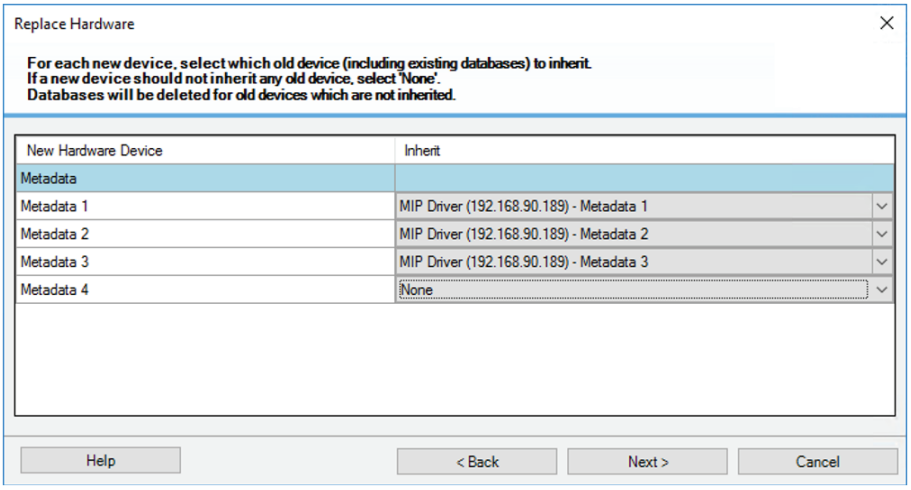


2. Click **Next**.
3. Check the information. If nothing has changed, click **Next**.

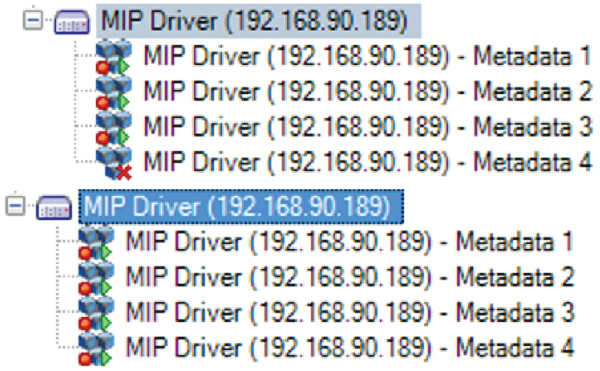


This window presents all the metadata channels provided by the metadata source, in this example four metadata channels.

4. For each new channel under **New Hardware Device**, select corresponding old channel. It is important to keep the correspondence between the old and the new channel numbers.



5. Click **Next** and then click **Confirm**.
6. Enable the new channels.



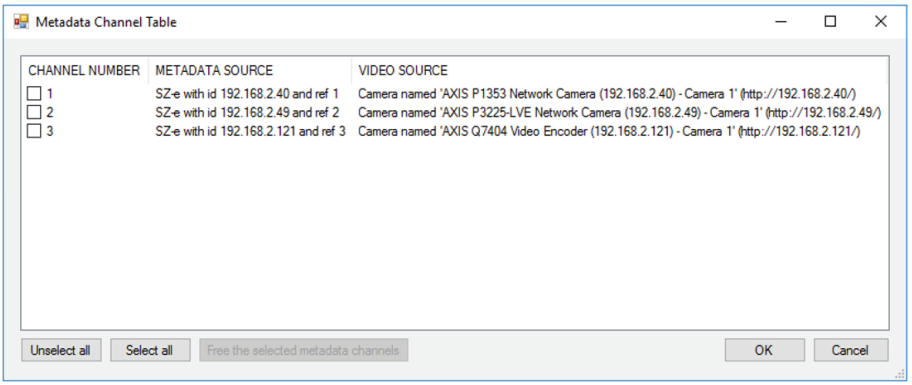
How to remove video sources from the bridge configuration

Note

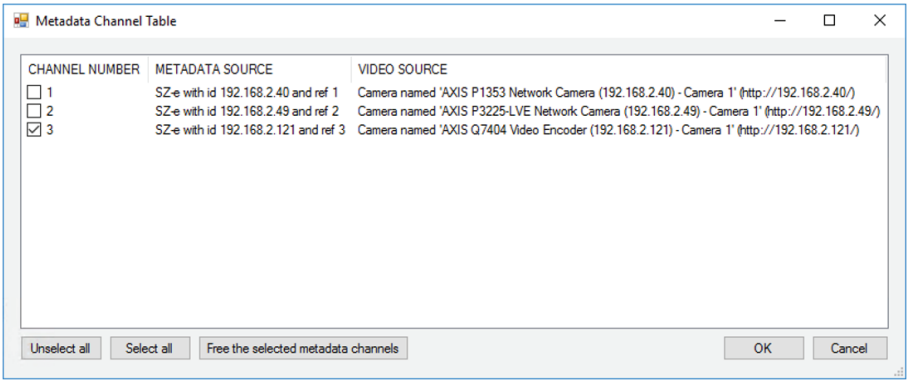
This section is only valid for XProtect Corporate/Expert.

When a video source is definitely removed from the XProtect system, we recommend to free the corresponding metadata channel, so that it can be used by a new video source.

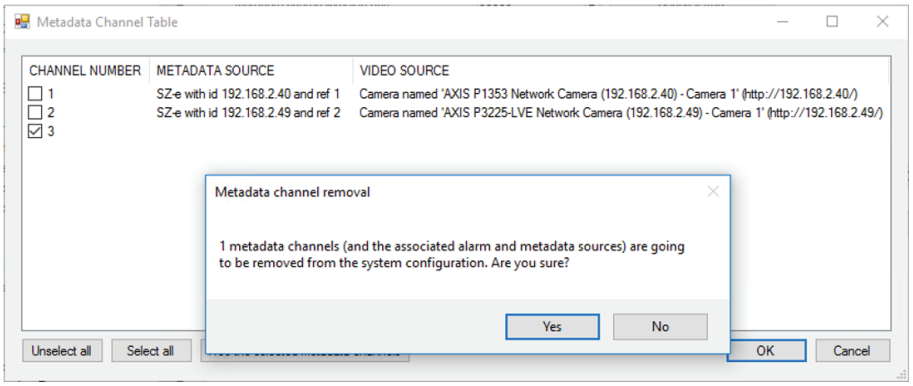
1. Click **Display metadata channel**.



2. Select the channel(s) that corresponds to the video sources that have been removed from the system and click **Free the selected metadata channels**.



3. Click **OK** and then click **Yes**.

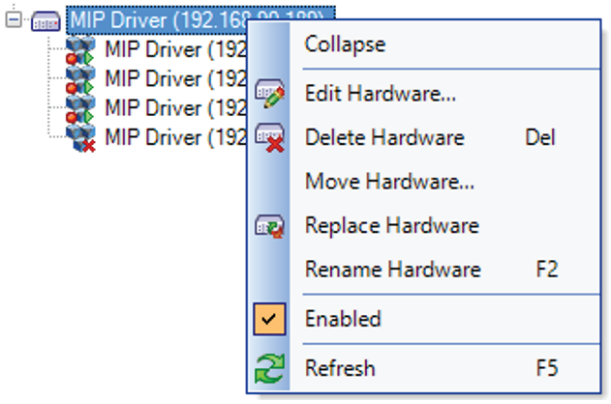


How to change the IP address of the bridge server

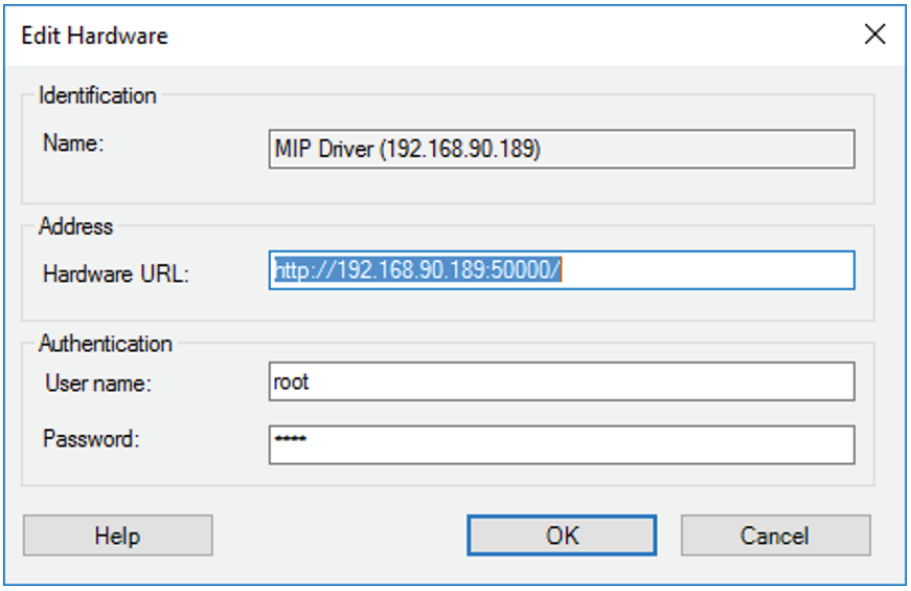
If you want to change the IP address of the host where the bridge is installed, do the following:

1. Change the IP address of the host at Operative System level.
2. Reboot the host.
3. **Valid only for Corporate/Expert:** Change the IP address of the MIP Plugin device in the Management Client.

- Right-click the MIP Driver device and click **Edit Hardware**.



- Type the new IP address in the **Hardware URL** field and then click **OK**.



- If the name of your MIP Driver device contains a reference to the old IP address, update the name.

NOTICE

It can take up to 5 minutes before XProtect starts retrieving metadata from the MIP Driver device.

How to change the IP address of an Axis device

If you want to change the IP address of an AXIS device where AXIS Perimeter Defender is installed, you have to:

1. Go to the device's webpage.
2. Stop the AXIS Perimeter Defender application running on the device.
3. Change the IP address.
4. Start the AXIS Perimeter Defender application.

5. In the XProtect Management Client, right-click the device and select **Edit hardware**.
6. Change the **Hardware URL** and use the new IP address.
7. Click **OK**.
8. In the AXIS Perimeter Defender MIP Plugin, go to **AXIS Perimeter Defender cameras** and click **Scan new cameras**.
9. Save the configuration with Ctrl+S.

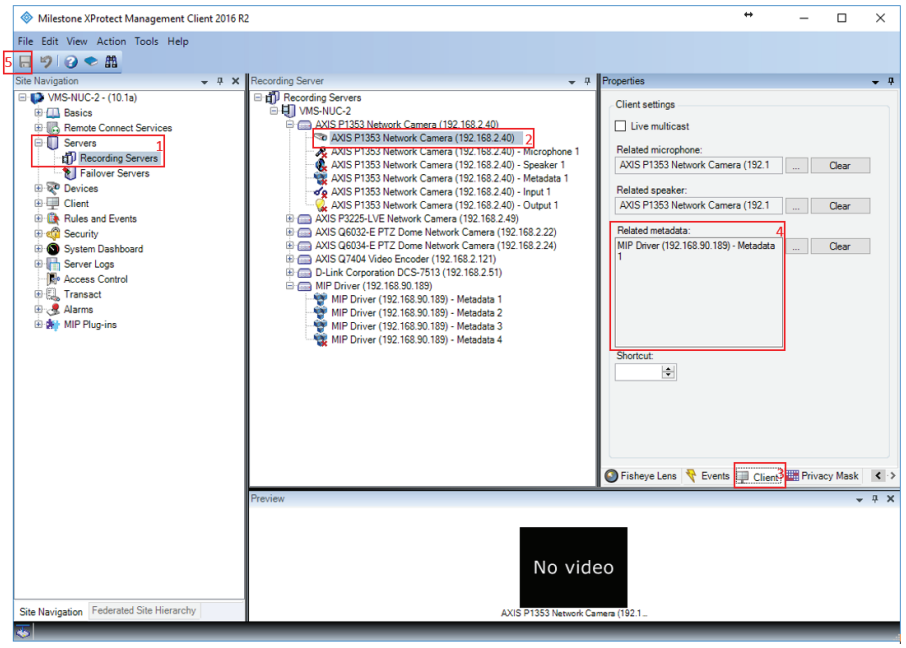
How to enable metadata export when exporting video footages

Note

This section is only valid for XProtect Corporate/Expert.

To make the XProtect System automatically export the recorded metadata when exporting video footages, it is necessary to manually associate the metadata source to the corresponding video source in the Milestone system.

1. In the Management Client, select the **Recording Server** to which the video source(s) you want to export belong.
2. Select the video source producing the video footages you want to export, in this example "AXIS P1353 Network Camera".
3. In the **Properties** menu, select the **Client** tab.
4. Make sure that the **Related metadata** is set to the MIP Driver device channel that corresponds to the chosen video source, in this example channel 1. Check channel by using the metadata channel table. See *Configure metadata through the Management Client Plugin on page 16*.
5. Save the configuration with Ctrl+S.
6. Repeat for every video source producing the video footages that you want to export



Advanced configuration

Important

To replay the metadata on top of the corresponding video streams, you have to use the exported Smart Client as video player. Any other video player, or any other video format different from the native XProtect one does not show the metadata on top of the video.

User Manual
AXIS Perimeter Defender with Milestone VMS

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