



ORBNET
SYSTEMS

Dallmeier Integration Kit for Milestone XProtect

Installation, Setup and User Guide

 **Dallmeier**



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1 Prerequisites

1.1 Software and Licensing

1.1.1 Microsoft System Requirements

Client:

- Microsoft® Windows® 10 Pro (64 bit)
- Microsoft® Windows® 10 Enterprise (64 bit)
- Microsoft® Windows® 10 Enterprise LTSB 2016 (version 1607 or later)
- Microsoft® Windows® 10 IoT Enterprise, version 1803 or later (64 bit), IoT Core

Server:

- Microsoft® Windows® Server 2016 (64 bit): Essentials, Standard and Datacenter
- Microsoft® Windows® Server 2019 (64 bit): Essentials, Standard and Datacenter
- Microsoft® Windows® Server 2022 (64 bit): Essentials, Standard and Datacenter

1.1.2 Milestone XProtect System Requirements

- XProtect Essential+, XProtect Express+, XProtect Professional+, XProtect Expert, XProtect Corporate 2020 R1 (20.1a) or above
- XProtect Event Server
 - The XProtect Event Server is included as part of your XProtect installation. ***Note* If this component has not been installed with your version follow the steps found in troubleshooting at the end of this document.**
- XProtect Device Licenses applied to your XProtect base license.
 - Spare device license is required for each Dallmeier device video channel connected to XProtect.
 - Below figure is effective as of XProtect 2021-R2

LICENSES	
SKU ID	Name
XPEXPLUSDL	XProtect Express+ Device License (DL)
XPPPLUSDL	XProtect Professional + Device License (DL)
XPETDL	XProtect Expert Device License (DL)
XPCODL	XProtect Corporate Device License (DL)

1.1.3 Dallmeier

- Hardware – **Dallmeier Panomera Camera**
- Hardware – **Dallmeier Domera Camera**
 - Provided by Dallmeier or relevant security systems distributor.
- Software - **Panomera S-Series Installer for XProtect**
 - Included in Integration Kit installer.
- License – **Panomera S-Series**
 - Related to XProtect plugin for Panomera S-Series devices only. Make a request to Milestone Sales purchase@milestonesys.com with the Milestone XProtect Software License Code (SLC) this installation relates to. The license is free of charge but needs to be associated to the SLC to operate.

1.1.4 ORBNET Systems

- License – **Dallmeier Integration Kit**
 - No license is required for the Dallmeier for XProtect plugin, this is a free of charge application.
- Installer – **SeMSyDecoderClient(64Bit).exe**
 - Available to download from <https://orbnet.com/dallmeier> once registered and signed into the website <https://orbnet.com/>
- Installer – **Dallmeier Plugins for XProtect v#.#.#.msi**
 - Available to download from <https://orbnet.com/dallmeier> once registered and signed into the website <https://orbnet.com/>
- Installer – **Dallmeier Drivers for XProtect v#.#.#.msi**
 - Available to download from <https://orbnet.com/dallmeier> once registered and signed into the website <https://orbnet.com/>

1.1.5 PC System Requirements

- Supported Microsoft operating system, listed in the above Microsoft system requirements.
- Workstation with XProtect Smart Client is to be used for viewing the Dallmeier cameras with the SeMSy Decoder Client.
 - Prerequisites
 - Minimum:
 - Nvidia GPU Pascal or newer (1070 or greater)
 - Operating system Microsoft Windows 10 Pro x64 bits
 - Recommended:
 - CPU 10-core 3.7 GHz
 - RAM 16 GB free
 - SSD 256 GB
 - Nvidia Quadro RTX4000 or higher
 - Operating system Microsoft Windows 10 Pro x64 bits



SeMSy Decoder Client does not work via Windows Remote Desktop.

- Mouse with scroll wheel, example mouse type below



1.1.6 Copyright, trademarks, and disclaimer

Copyright © 2022 ORBNET Systems

Copyright law and international treaties protect this Software.

Licensing agreements specify the terms and conditions of the Software use.

Neither the Customer nor any third party will be permitted to inspect, possess, use, copy, or attempt to discover any part of the Software source code (or any portion thereof).

Trademarks

XProtect is a registered trademark of Milestone XProtect Systems A/S.

Milestone XProtect and connected components will be referred to as XProtect throughout this document.

Panomera and Domera are trademarks of Dallmeier electronic GmbH & Co.KG.

Microsoft and Windows are registered trademarks of Microsoft Corporation.

This document contains other trademarks which belong to their respective owners.

Disclaimer

In preparing this text, due care has been taken to ensure that it is intended for general information purposes only.

Information provided herein does not constitute any kind of warranty, and any risk resulting from its use rests with the recipient.

Adjustments may be made without prior notification by ORBNET Systems.

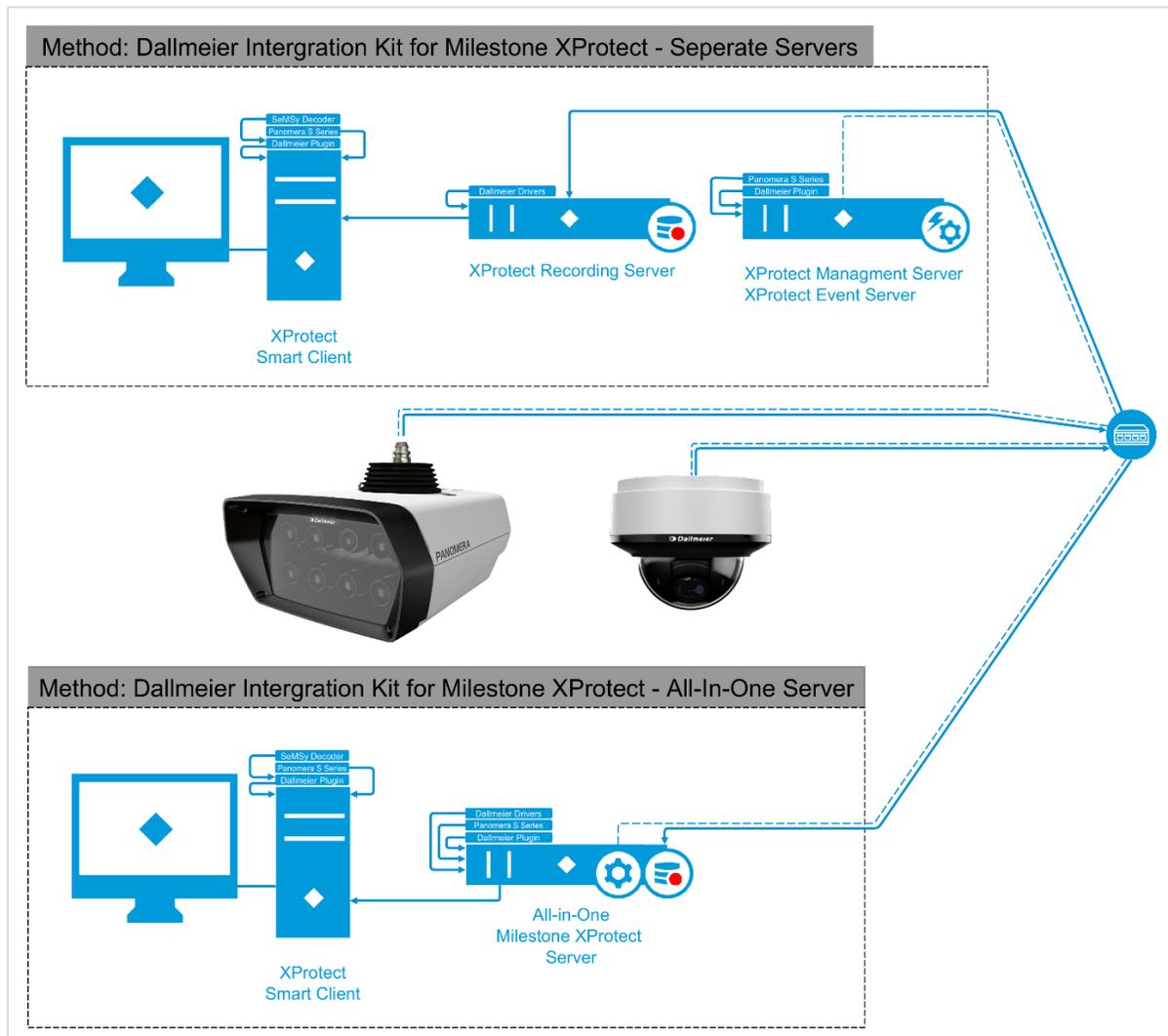
In this text, all names and organizations referenced in examples are fictitious.

2 Software Schematic with Installation Methods

Dallmeier cameras are connected directly to the XProtect Recording Server and managed by the XProtect Management Server.

Please use the following installers for each XProtect server or client.

- XProtect Management Server
 - Panomera S-Series
 - Dallmeier Plugins for XProtect
- XProtect Recording Server
 - Dallmeier Drivers for XProtect
- XProtect Smart Client
 - Panomera S-Series
 - SeMSy Decoder Client
 - Dallmeier Plugins for XProtect

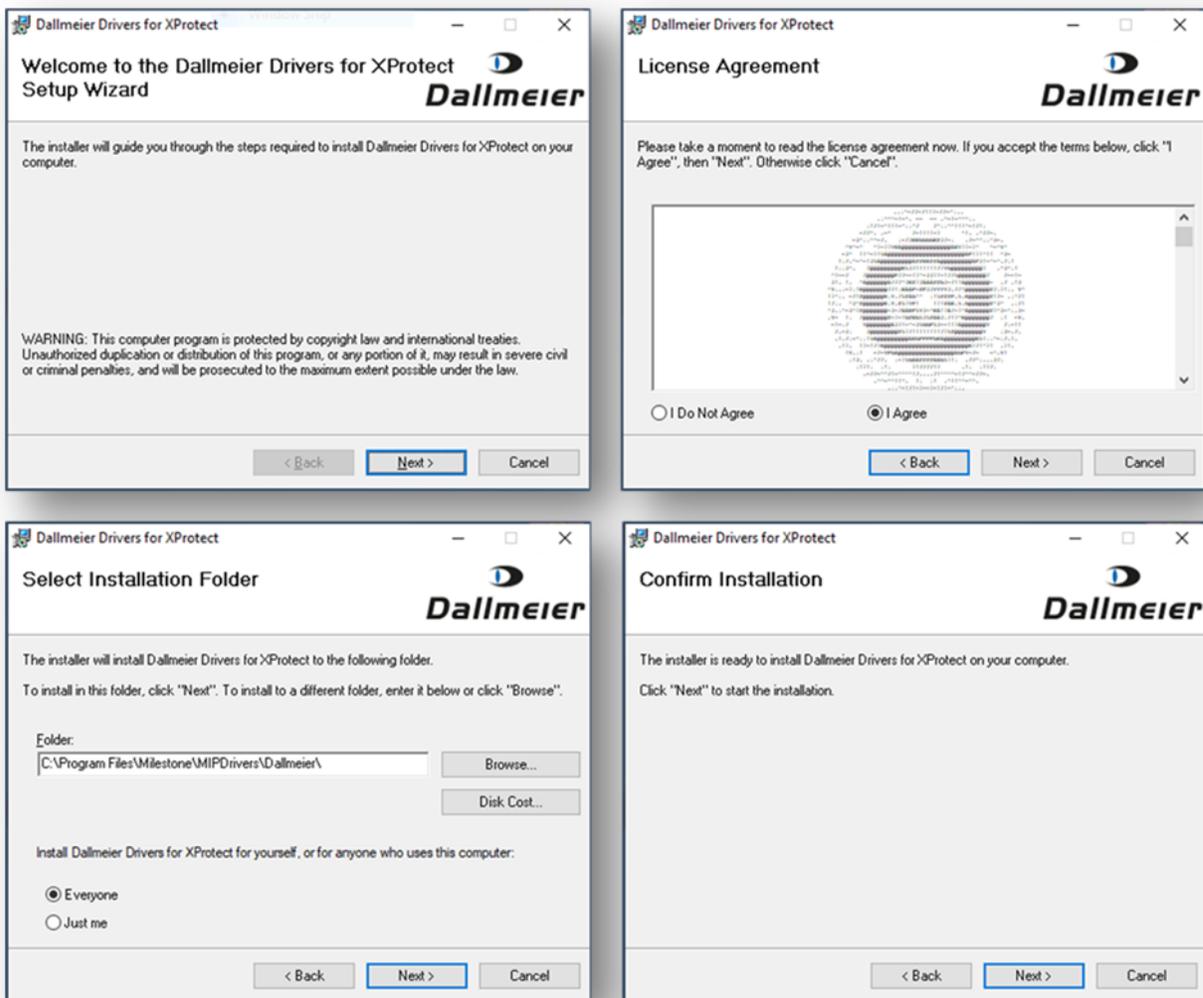


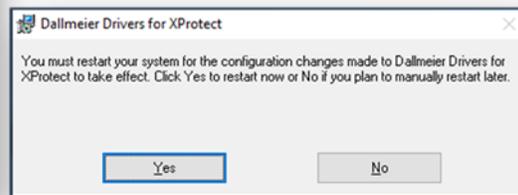
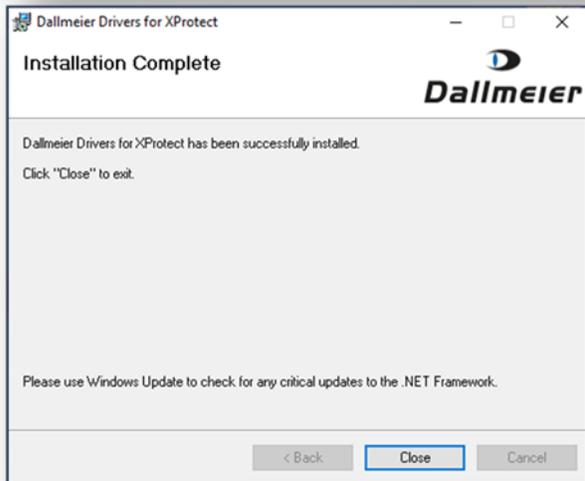
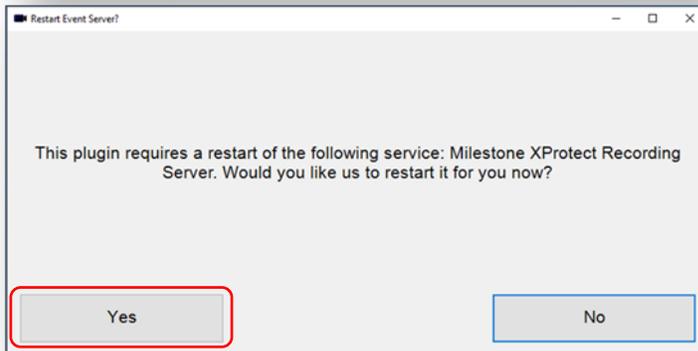
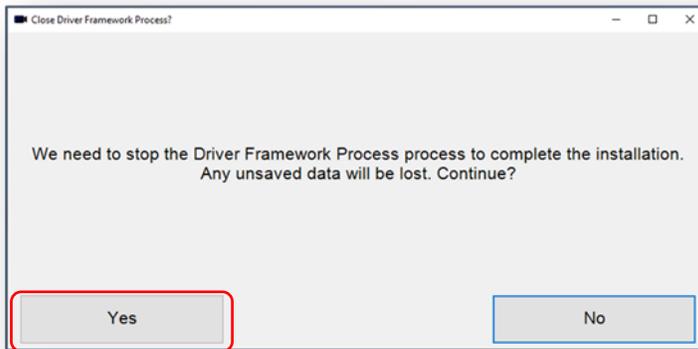
3 Installation of Dallmeier Integration Kit for Milestone XProtect

Place the Dallmeier Integration Kit for Milestone XProtect that includes the SeMSy Decoder, Dallmeier Driver for XProtect Setup and Dallmeier Plugins for XProtect Setup (including Panomera S Series Plugin for XProtect) installers in a folder on the desktop and double the relevant installer to start the installation process.

3.1 XProtect Recording Server

Start with the XProtect Recording Server that will be used for Dallmeier devices. Install Dallmeier Drivers for XProtect.

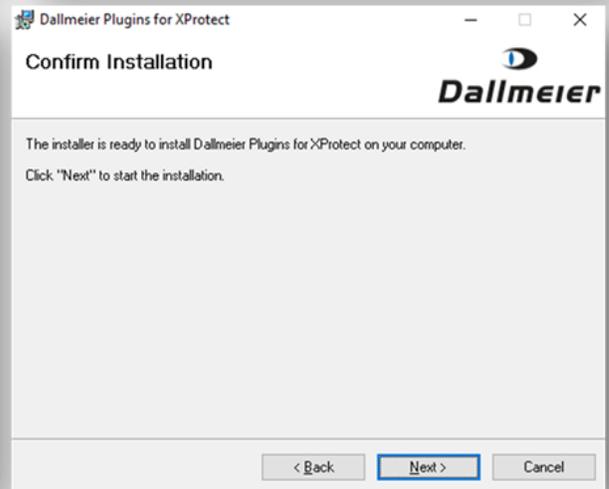
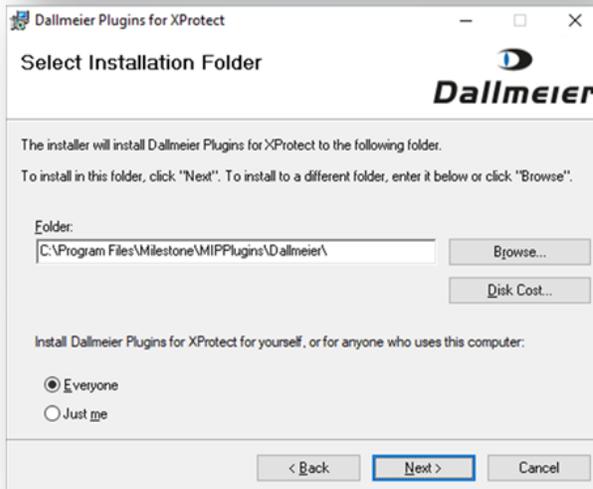
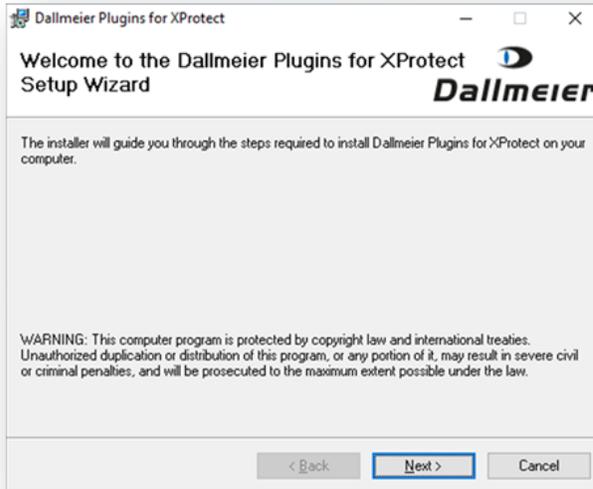




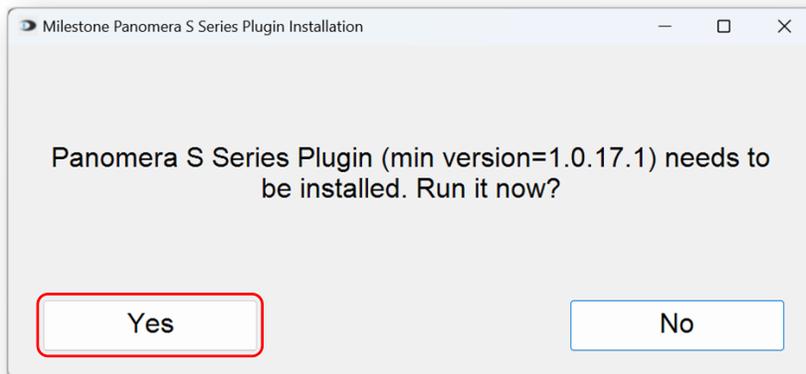
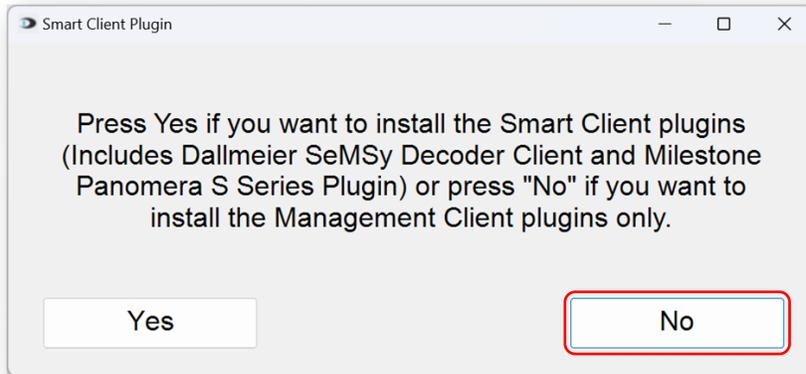
Restarting the server is recommended, but not required.

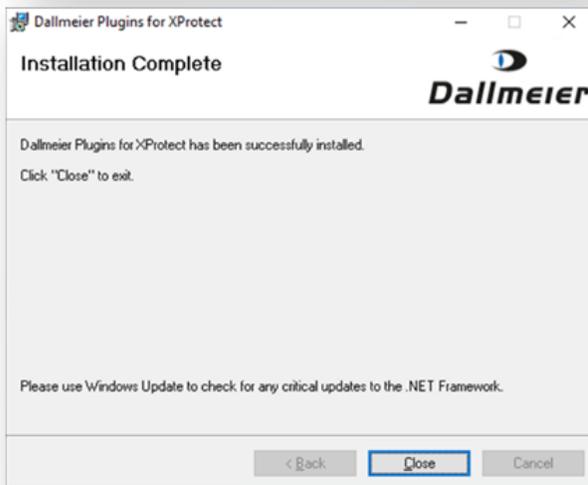
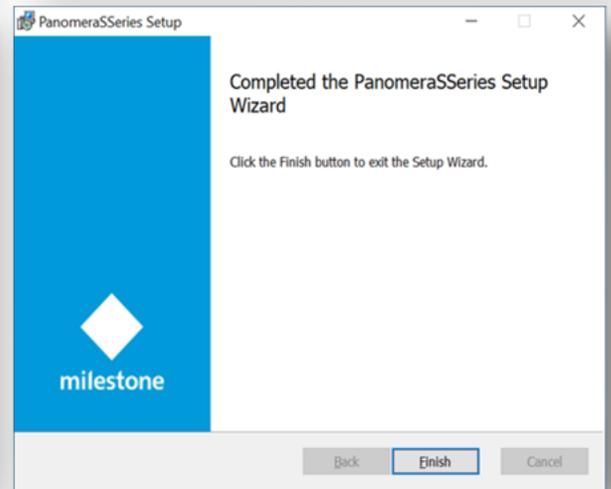
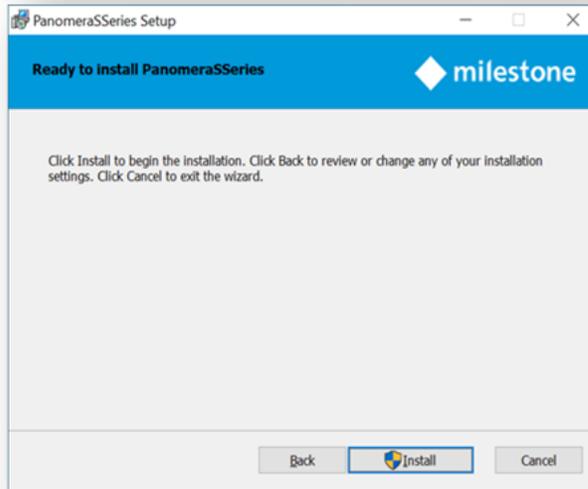
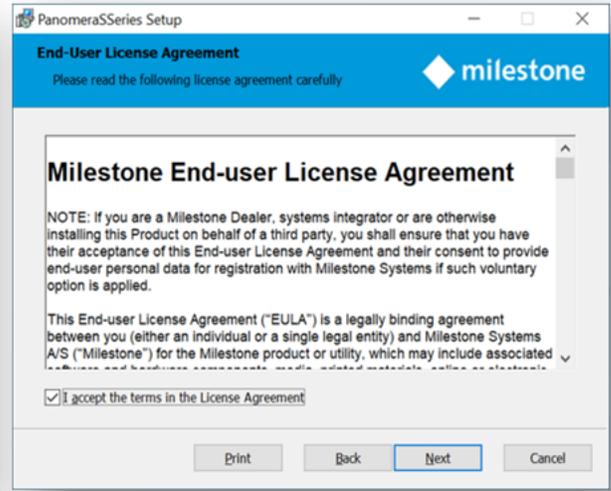
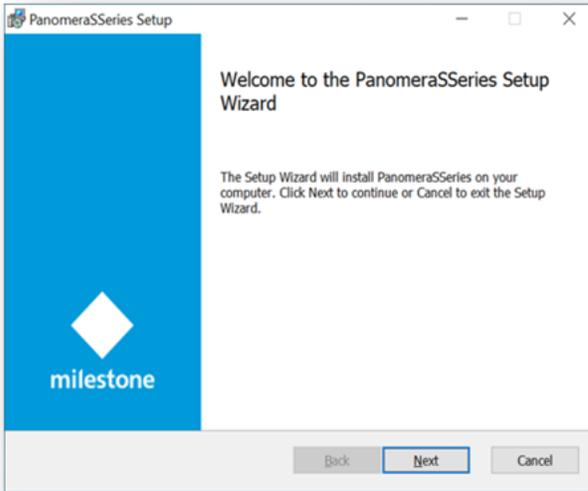
3.2 XProtect Management Server

Move onto the XProtect Management Server with the XProtect Event Service. Run the Dallmeier Plugins for XProtect installer. This installer also covers the installation of the Panomera S Series Plugin for XProtect.



When prompted for installation of the XProtect Smart Client plugins press **No** to prevent the installation of operator client installers. This is only recommended for desktop clients used alongside the XProtect Smart Client with the recommended system requirements.





3.3 XProtect Smart Client

If the XProtect Smart Client is to be used for viewing the Dallmeier cameras install the SeMSy Decoder Client.

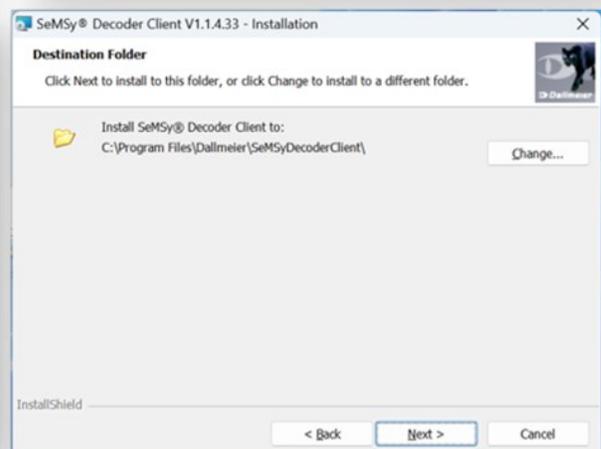
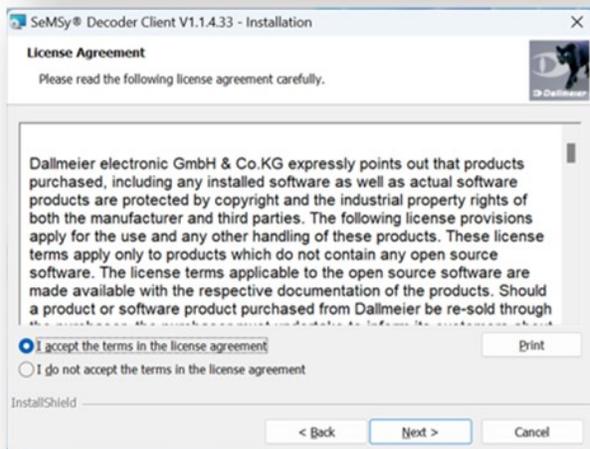
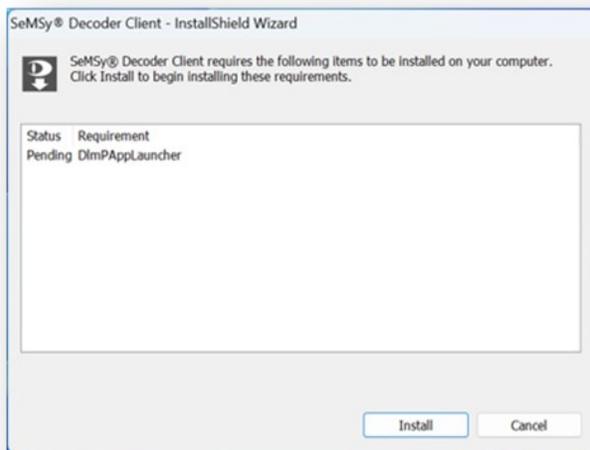


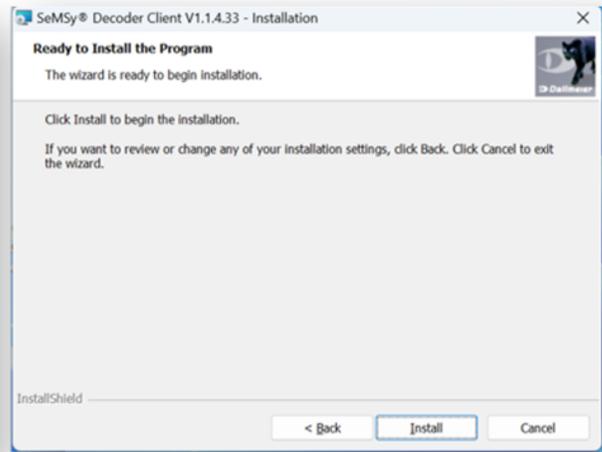
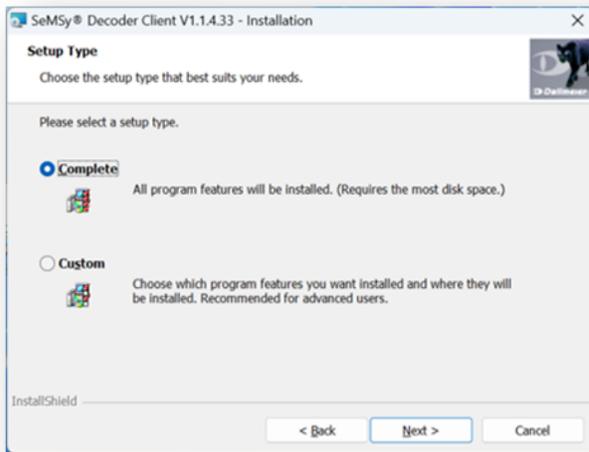
As this requires a large amount of processing and graphics, this is not recommended for use with application servers as the system performance will be degraded.



For the XProtect Smart Client, please ensure the hardware meets with the recommended [PC System Requirements](#).

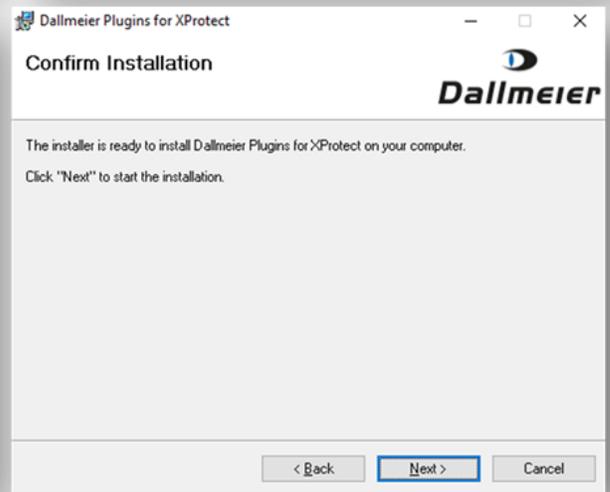
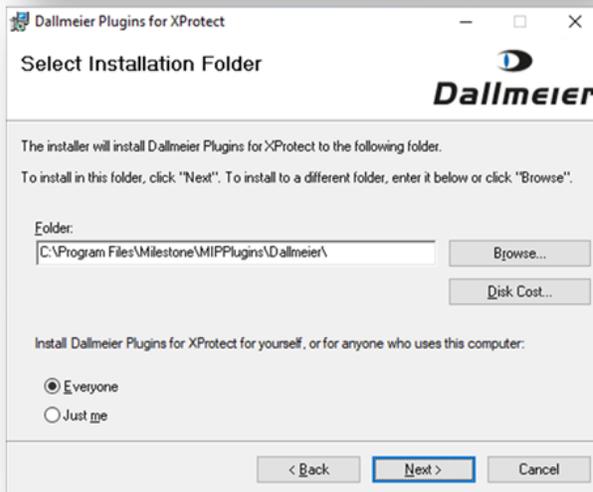
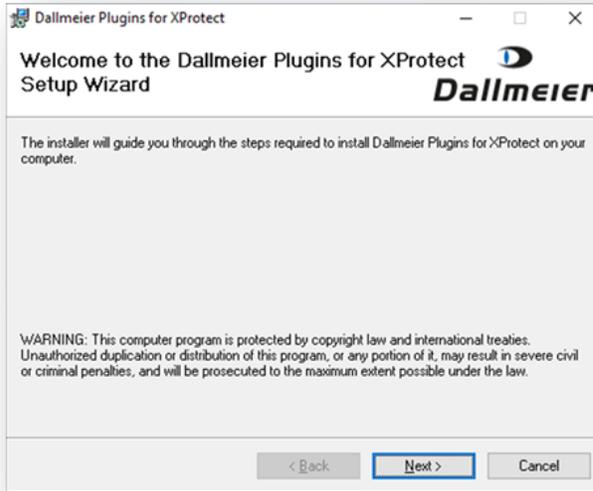
First run the SeMSy Decoder Client installer.



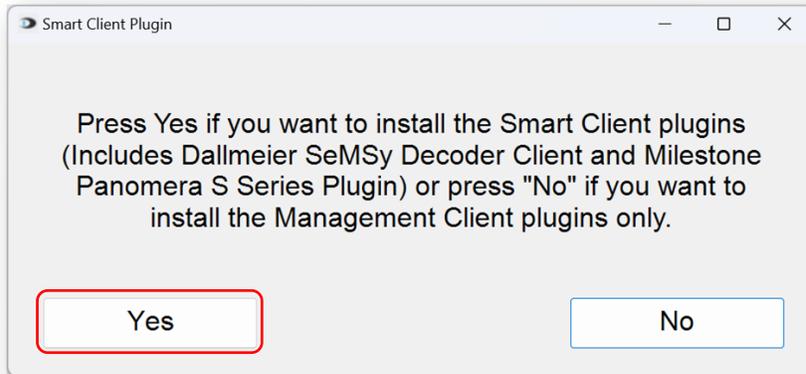


SeMSy Decoder Client does not work via Windows Remote Desktop.

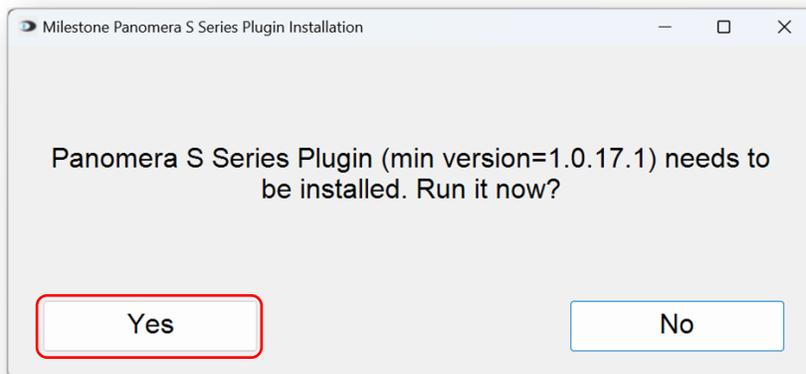
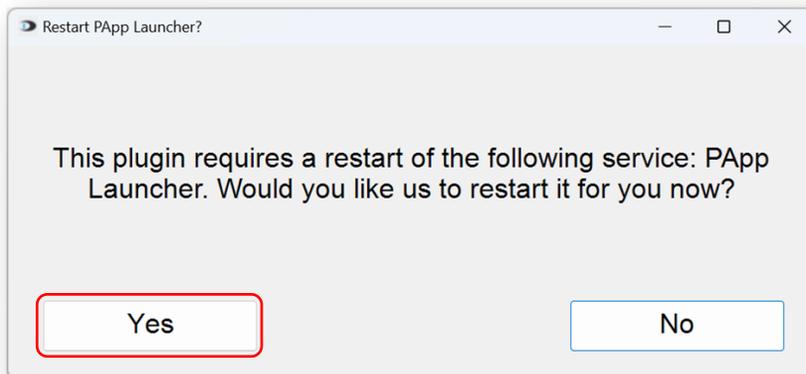
Next run the **Dallmeier Plugins for XProtect** installer. This installer also covers the installation of the **Panomera S Series Plugin for XProtect**.

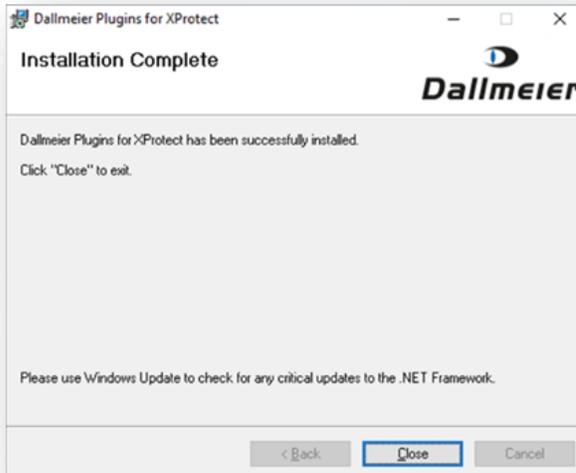
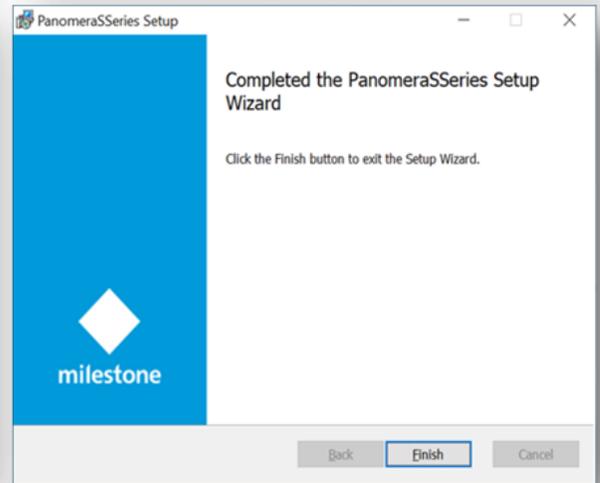
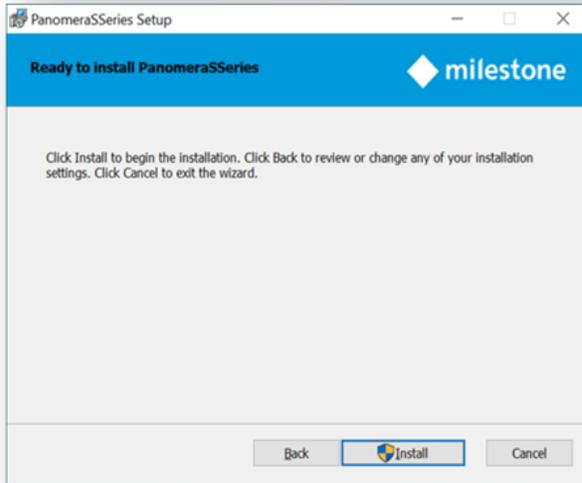
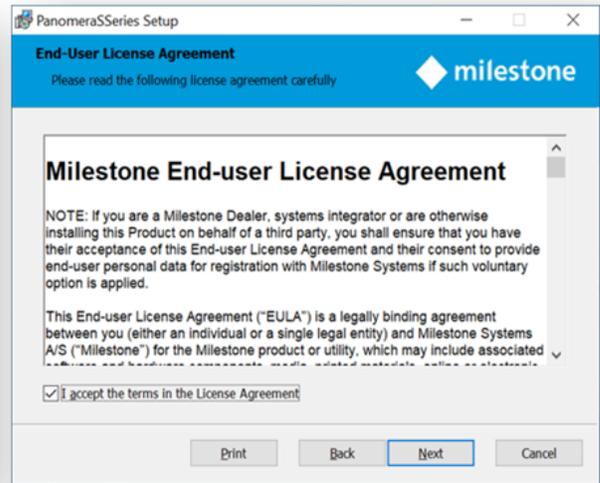
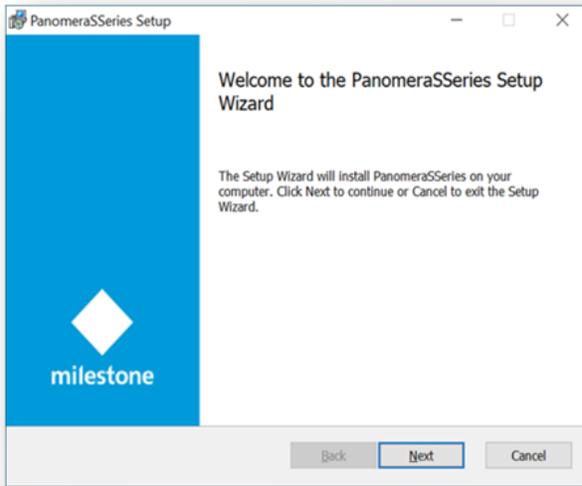


When prompted for installation of the XProtect Smart Client plugins press **Yes** to start the installation of operator client installers. This is only recommended for desktop clients used alongside the XProtect Smart Client with the recommended system requirements.



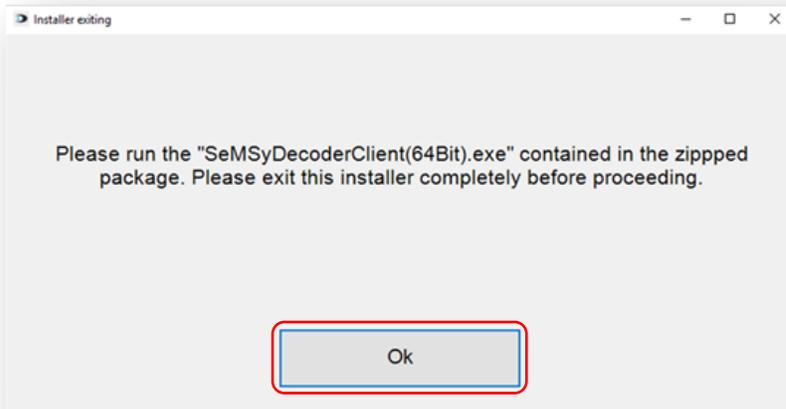
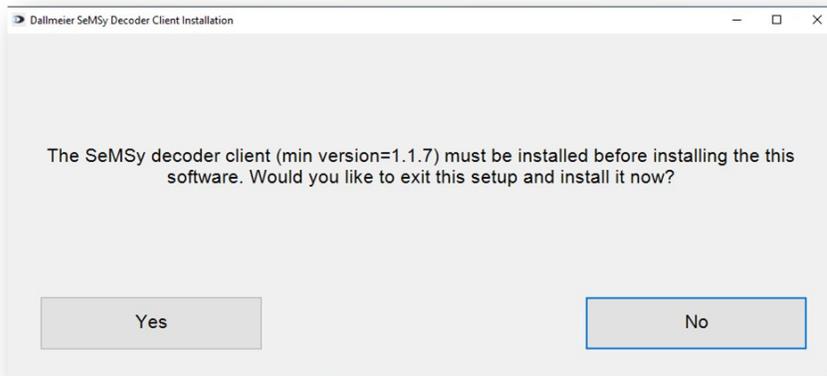
At this stage the installer confirms that the **SeMSy Decoder Client** is already installed and is at the correct version. If the message, you get here is different check [SeMSy Decoder Client – Not Found](#) .

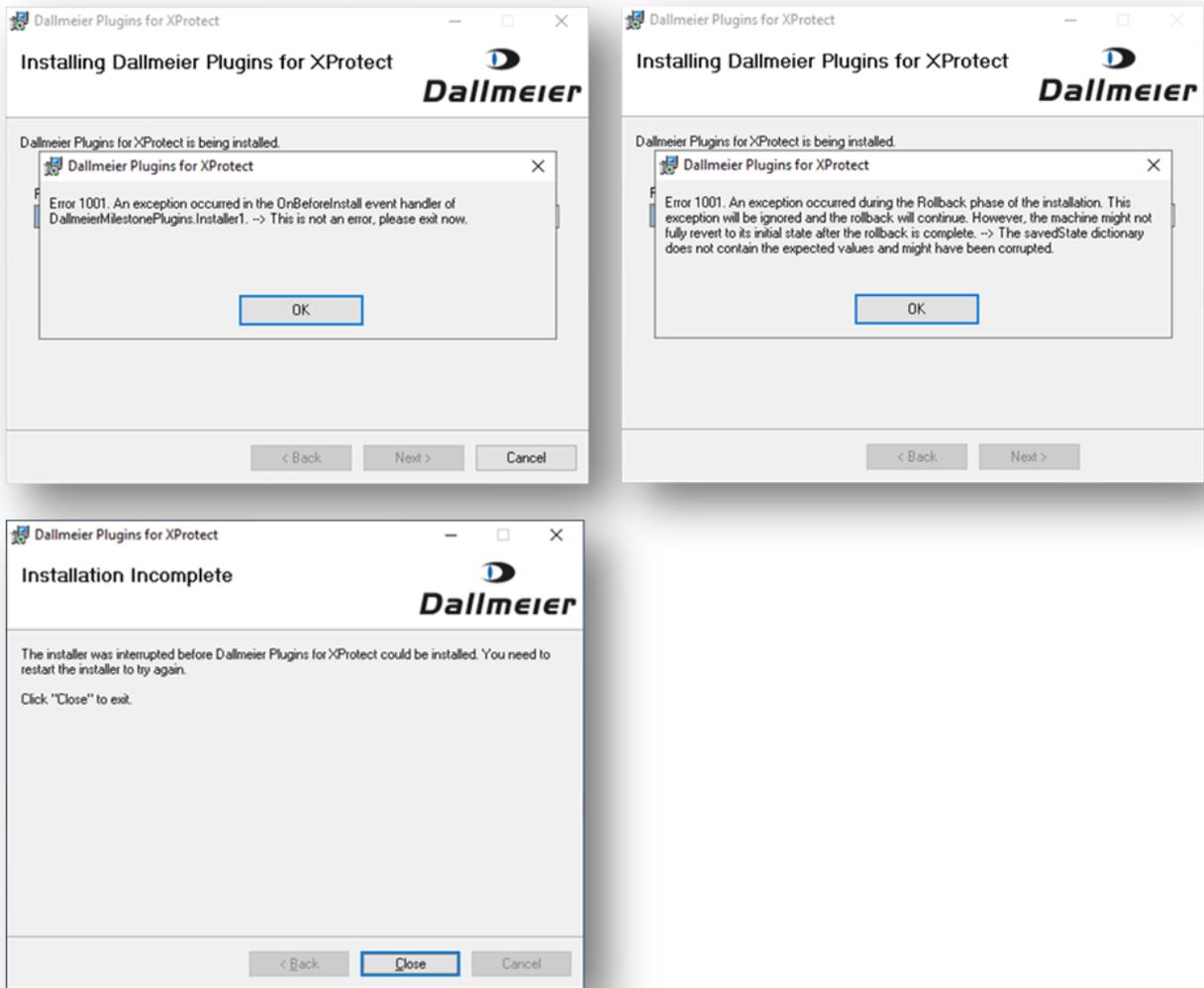




3.3.1 SeMSy Decoder Client – Not Found

Install setups if SeMSy Decoder Client is not found. If the client was not installed before running the **Dallmeier Plugins for XProtect** installer.





Installation is canceled, now run the **SeMSy Decoder Client**. Once complete, rerun the **Dallmeier Plugin for XProtect** installer.

If you had already run the installer, there may have been an old version of the **SeMSy Decoder Client** already installed. In this case uninstall and reboot. Run the installer again and this should resolve the issue.

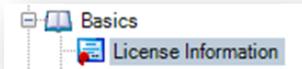


SeMSy Decoder Client does not work via Windows Remote Desktop.

4 License

Dallmeier Integration Kit Panomera S-Series

License information can be found under [Basics > License Information](#) in the [XProtect Management Client](#) navigation tree.



Connected devices related to the Panomera S-Series driver will be shown here.

License Details - Current Site: MIP-CORP					
License Type	Activated	Changes without activation	In Grace Period	Grace Period Expired	Without License
Device Licenses	0	0 out of 0	19	0	0
Panomera S-Series	0	N/A	1	0	0

To apply for this device license to your XProtect system, contact Milestone Purchase Team (purchase@milestonesys.com) alternatively Dallmeier sales for further information.

Ensure your device is correctly activated and not operating in a [Grace Period](#). Use **Activate License Manually** using **Online** or **Offline** Activation to update your XProtect license.

4.1.1 Dallmeier Plugin and Dallmeier Driver for XProtect

No license is required for these installers.

5 Configuration

6 XProtect Management Client

6.1 Add Dallmeier device

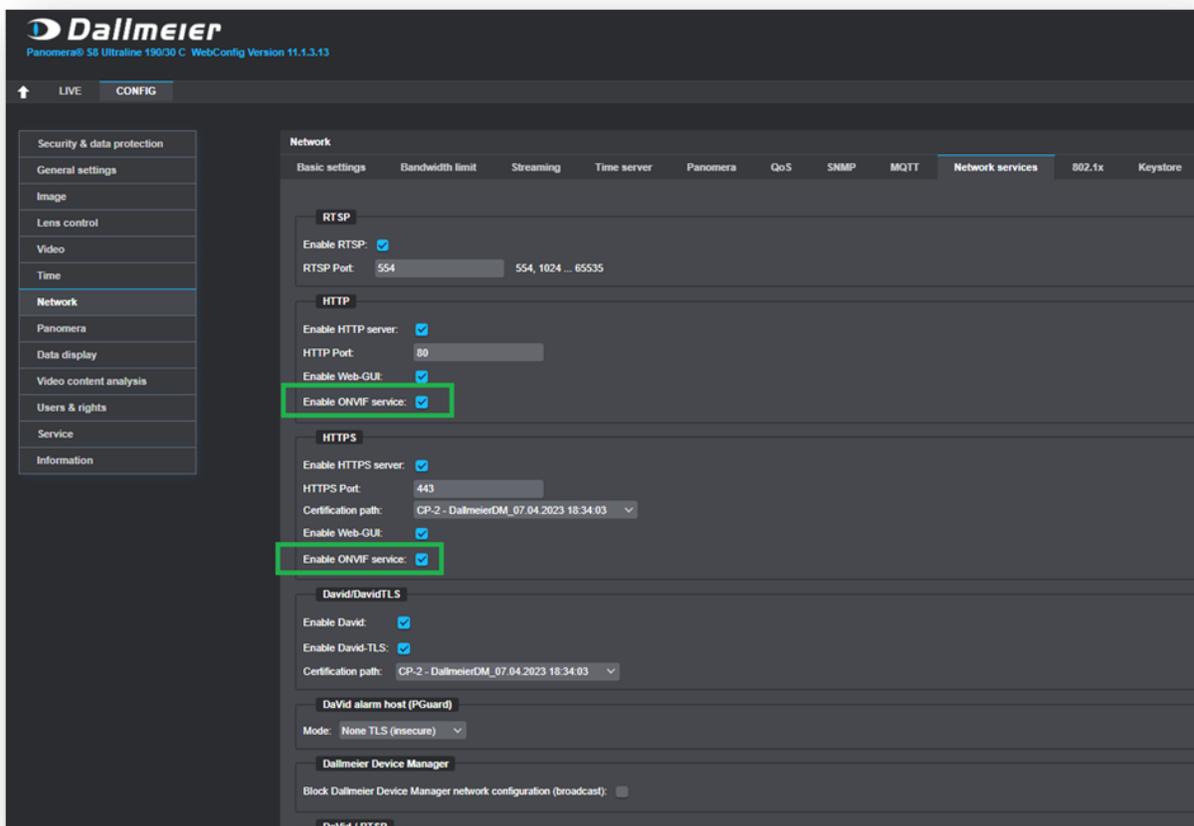


Before adding a Dallmeier device please check that ONVIF is enabled on the camera device webpage. These XProtect drivers use ONVIF profiles to interface with the camera. Without ONVIF enabled the device will fail to add to an XProtect Recording Server.

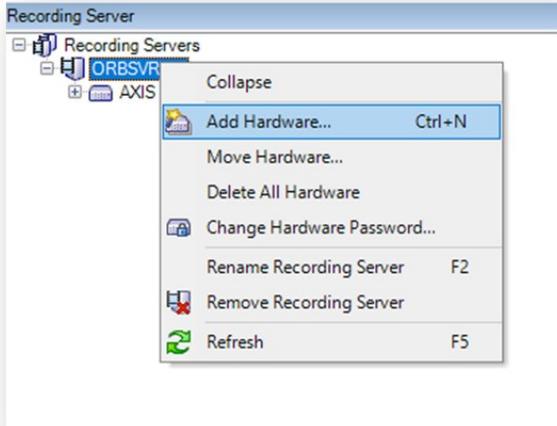


For Panomera, new firmware will activate ONVIF on all sub-sensors when the main sensor is activated. Older firmware requires ONVIF activation on each sub sensor.

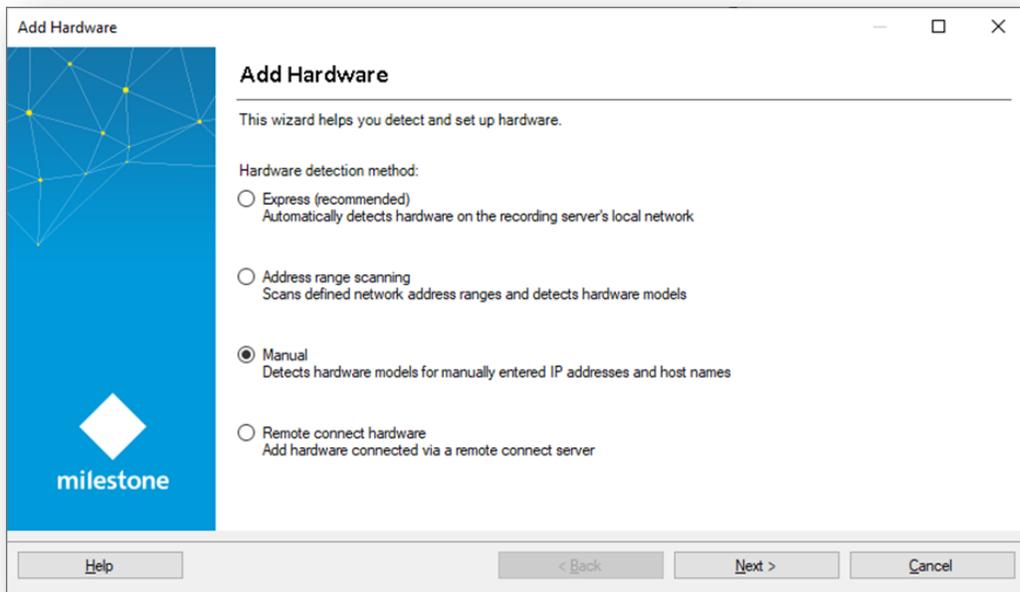
From WebConfig go to **Network > Network services > HTTP > Enable ONVIF Service**
Network > Network services > HTTPS > Enable ONVIF Service



Select the XProtect Recording Server you wish to install this device on, right click and select **Add Hardware**

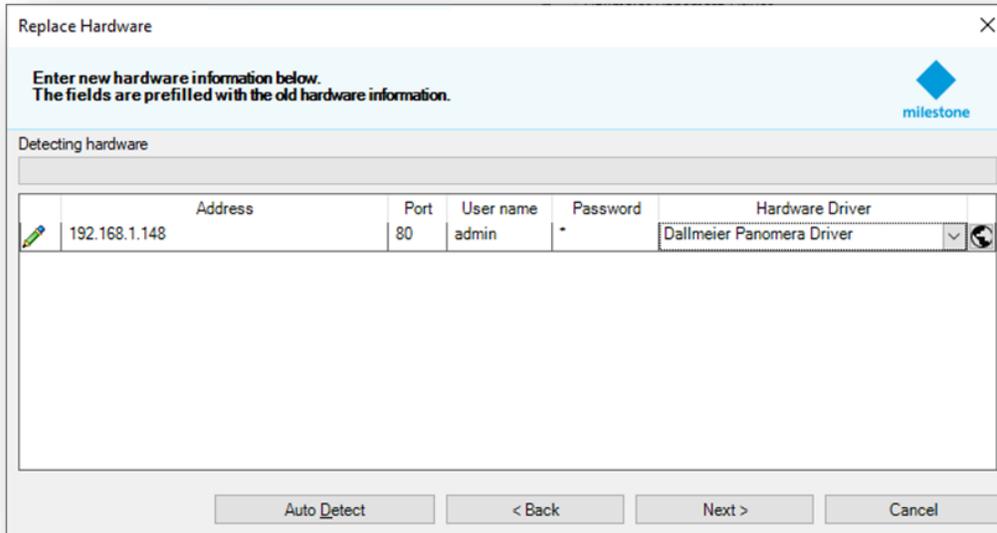


Manual mode must be selected

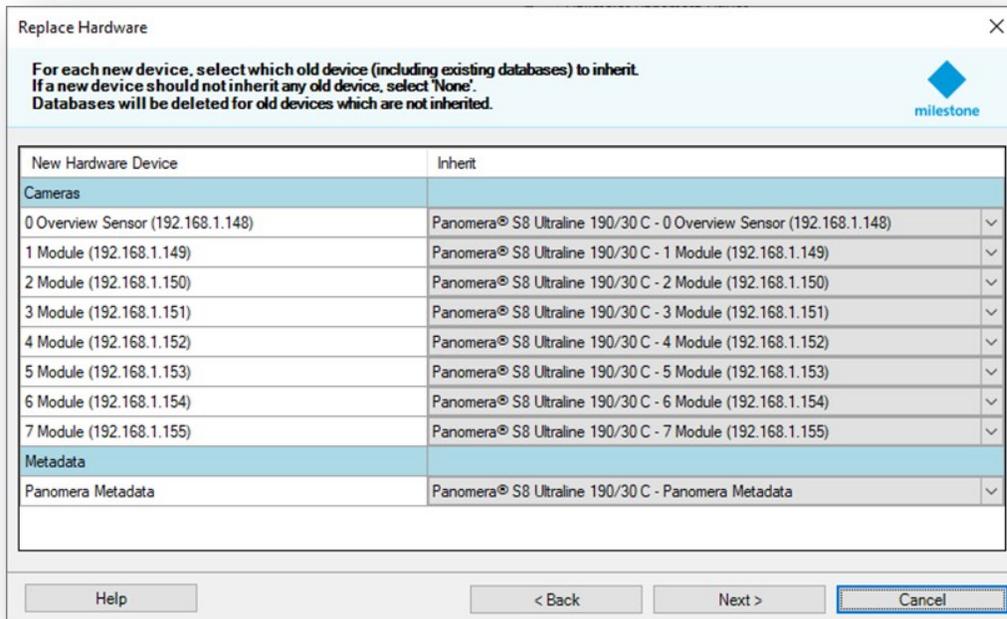


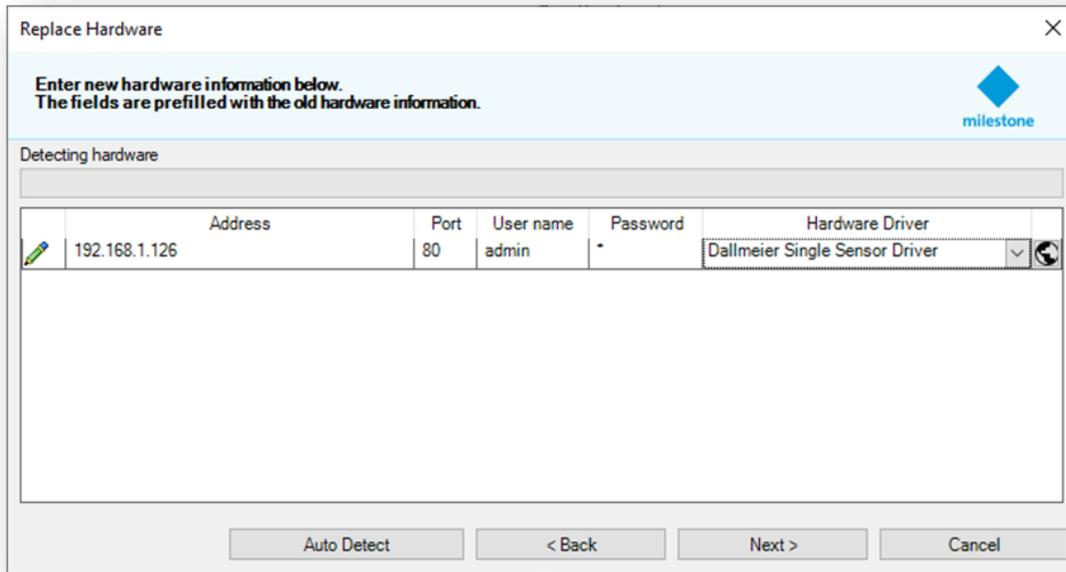
With the Dallmeier for XProtect Drivers installed you will have available two new camera drivers.

- Dallmeier Panomera Driver
- Dallmeier Domera Driver

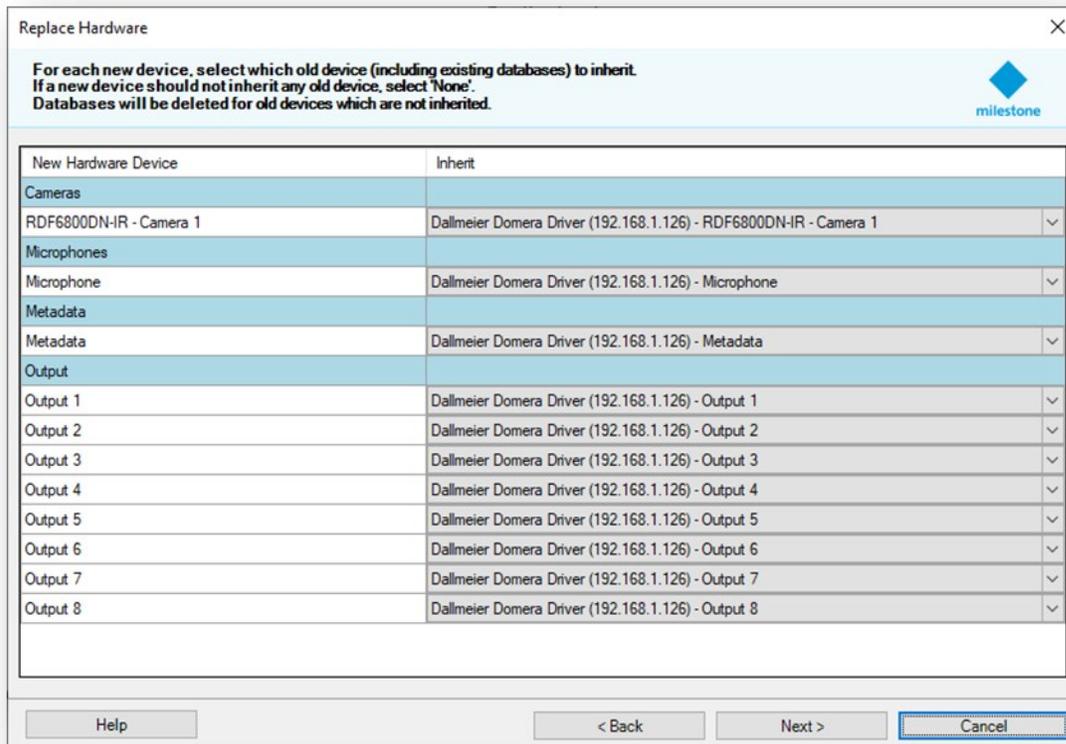


This makes the eight-channel Panomera device available to XProtect





This will connect Dallmeier Domera devices with relevant audio and connected outputs.



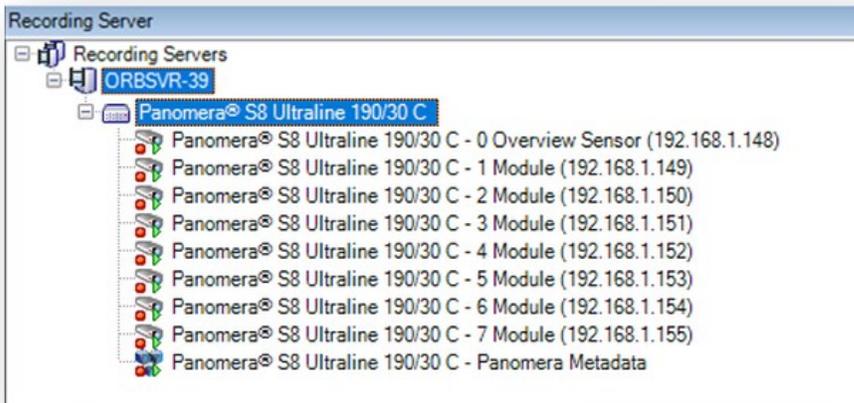
6.2 Dallmeier Integration Kit - Device Setup

6.2.1 Dallmeier Panomera Driver

The Dallmeier Panomera Driver device will show in the XProtect Management Client as a hardware device attached to an XProtect Recording Server.

This device has;

- 8x Video Channel
- 1x Metadata

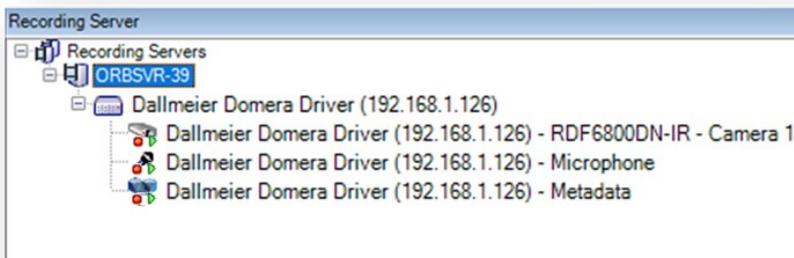


6.2.2 Dallmeier Domera Driver

The Dallmeier Domera Driver device will show in XProtect as a hardware device attached to an XProtect Recording Server.

This device has;

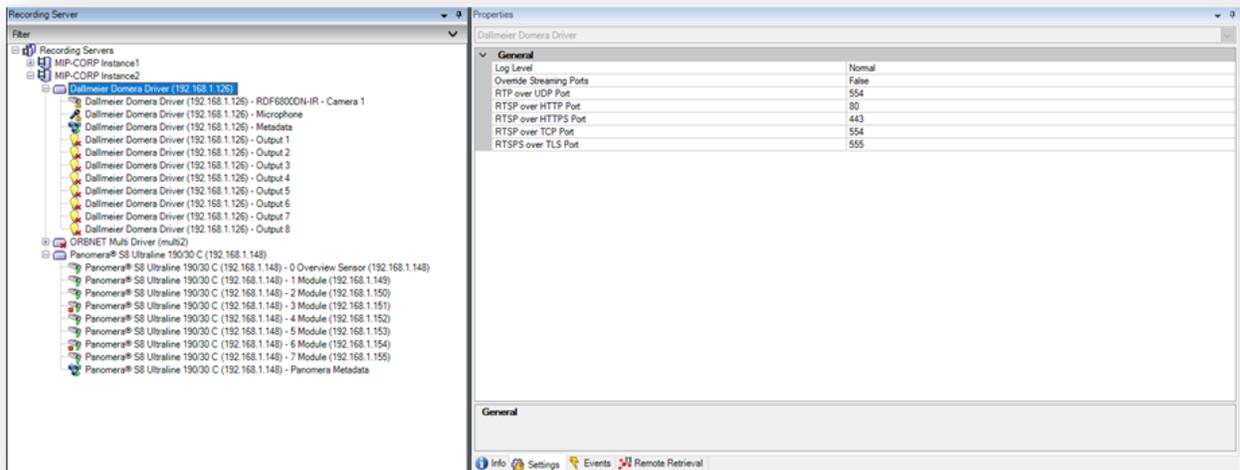
- 1x Video Channel
- 1x Microphone Channel
- 1x Metadata
- 8x Outputs



6.2.3 Hardware Device Settings

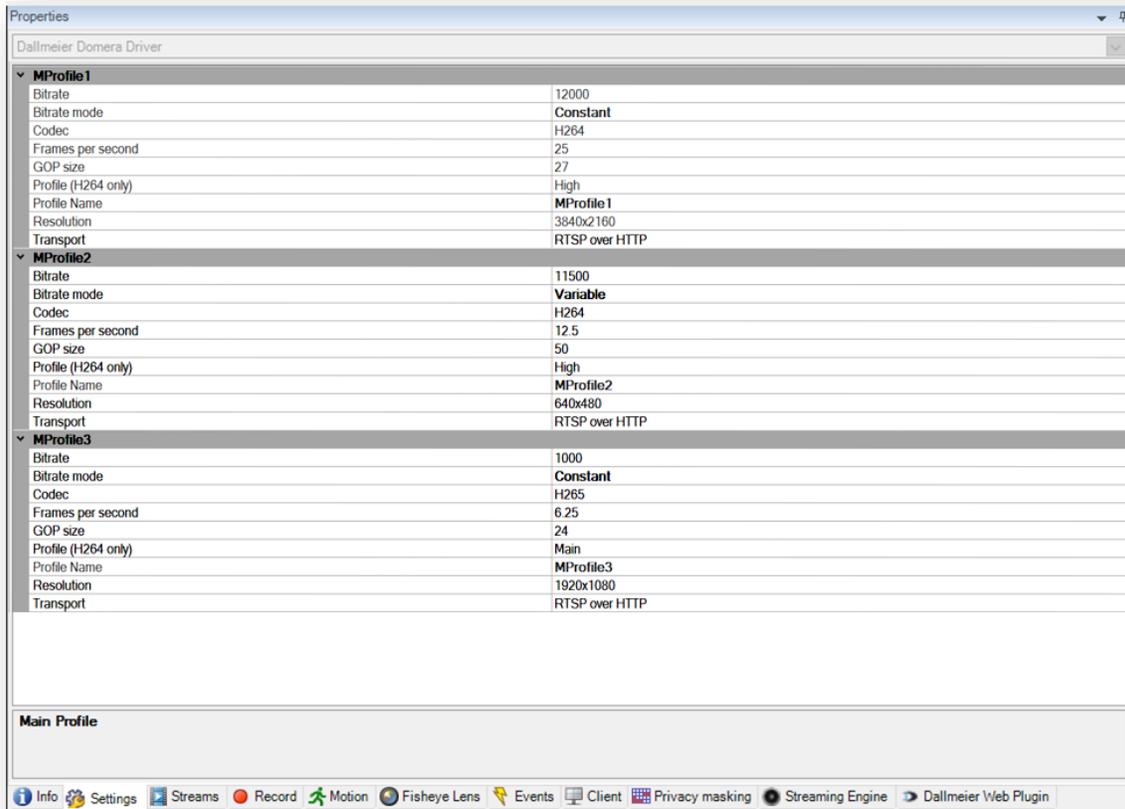
From here you can select a Log Level (Normal, Debug, Trace). This will change how much connection data is captured from the connected devices.

Other options relate to overriding the streaming ports. This is currently only an option for Domera cameras.



6.2.4 Video Device Settings

The Domera driver has settings for two streams.



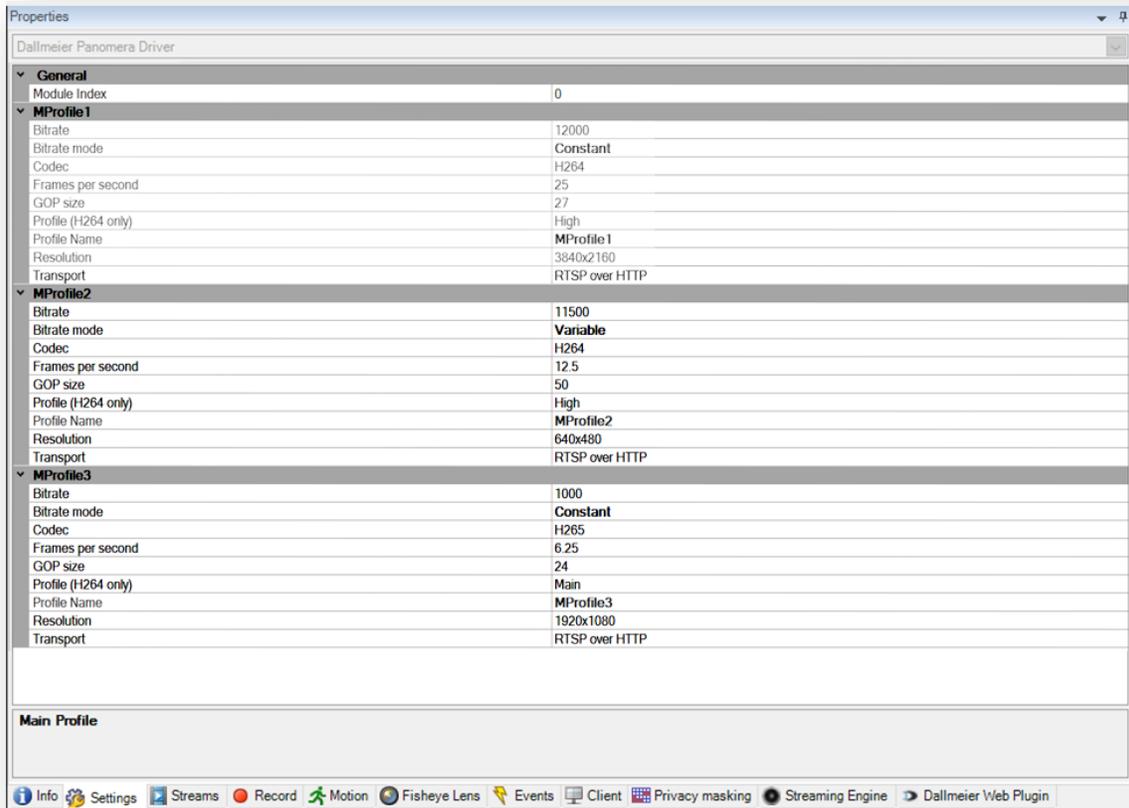
MProfile1 (This profile is greyed out and cannot be edited)

- **Bitrate**
 - o A decimal value between * and * is supported
- **Bitrate mode**
 - o Constant
 - o Variable
- **Codec**
 - o H264
 - o H265
 - o JPEG
- **Frames per second**
 - o A decimal value between 1 and 25 is supported
- **GOP size**
 - o A numeric value between * and *
- **Profile (H.264 only)** – hidden when JPEG or H.265 is selected
 - o Main
 - o High
- **Profile Name**
 - o Predefined

- **Resolution**
 - o Dropdown box with available options
- **Transport**
 - o RTP (UDP)
 - o RTSP (TCP)
 - o RTSPS (TCP with TLS)
 - o RTSP over HTTP
 - o RTSP over HTTPS

Same options available for **MProfile2 and MProfile3 (Both profiles can be edited)**

Options available for Panomera devices



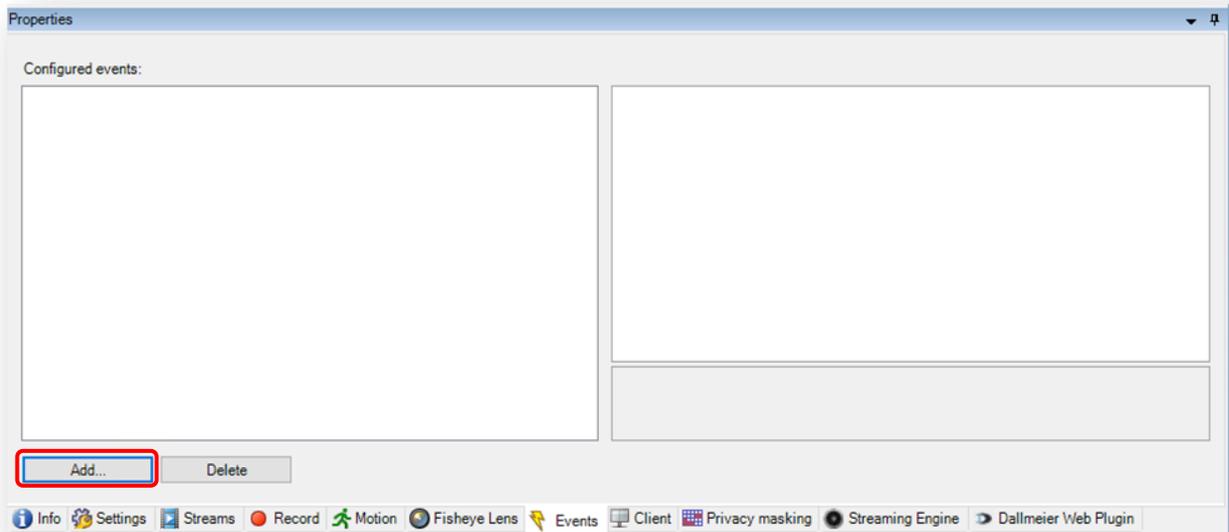
The same options are available as are for Domera and all profiles are editable.

Same options available for **MProfile2 and MProfile3**

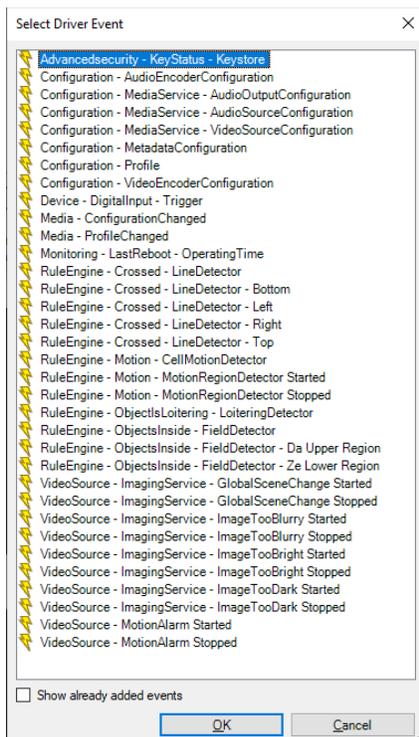
6.2.5 Video Device Event Settings

The drivers have predefined events that have been made available to each device channel.

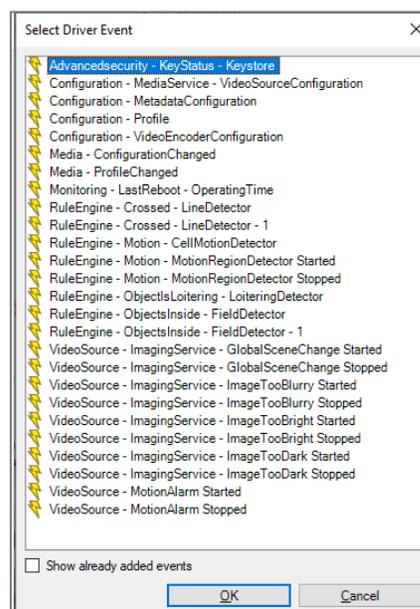
Note for most of these events require some form of onboard configuration before the event will be able to trigger into XProtect.



Events shown for Domera



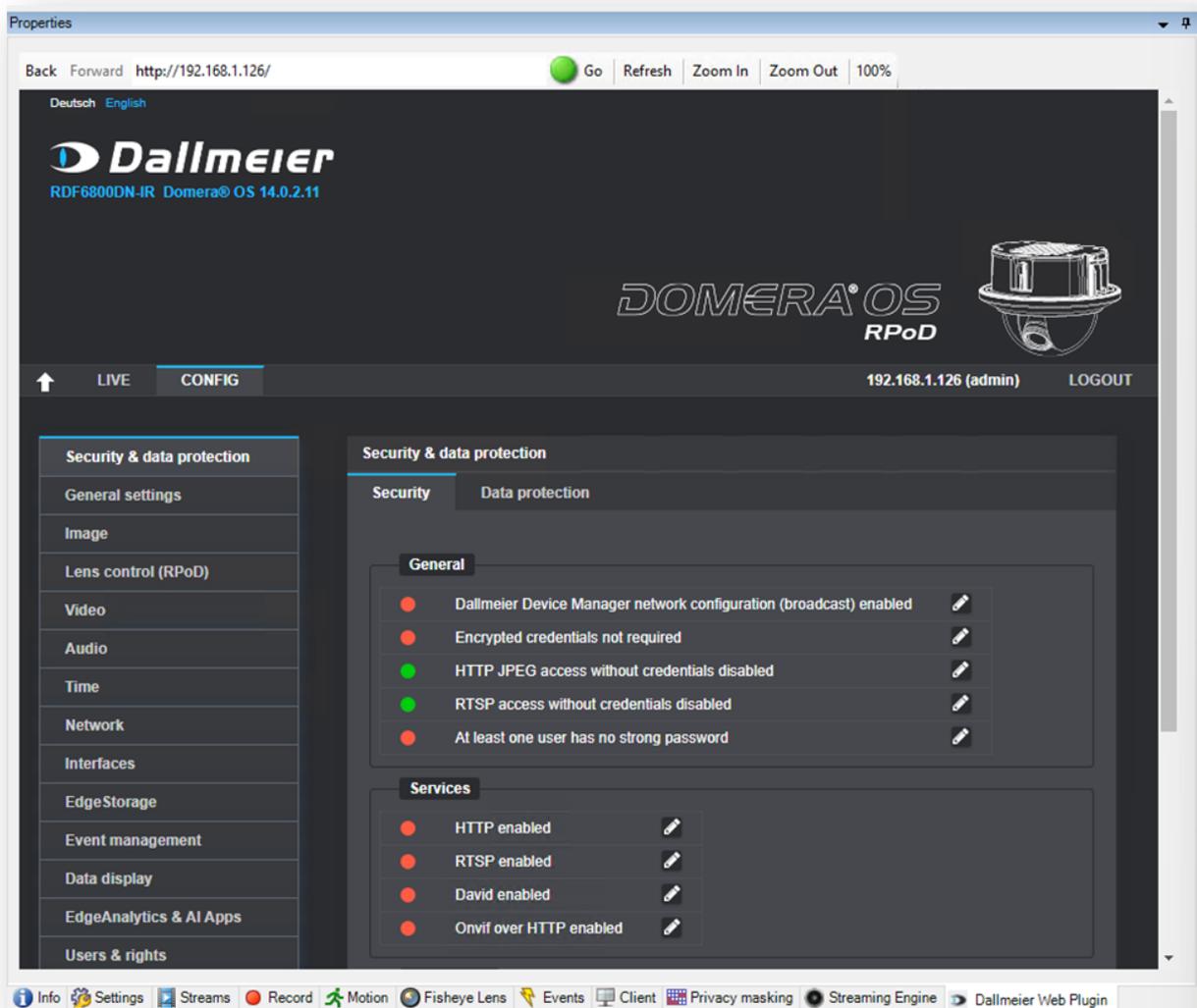
Events shown for Panomera



6.2.6 Dallmeier Web Plugin

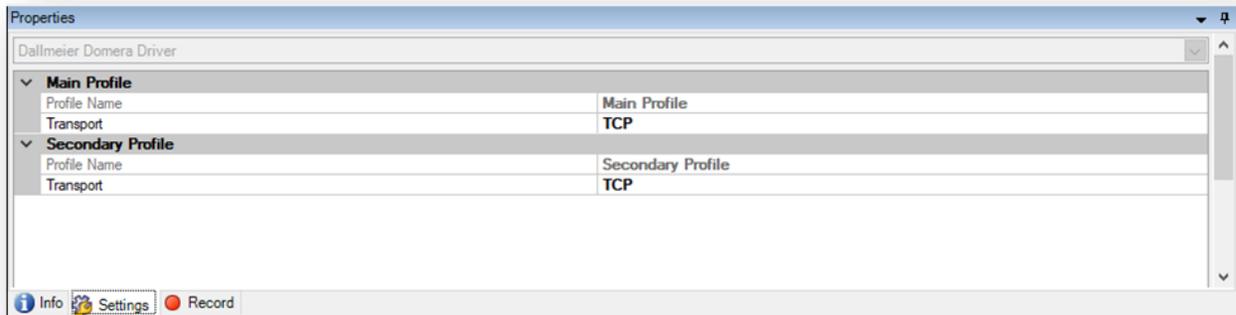
To allow easier access to the Dallmeier device web page a new tab has been added to the video channel settings of the XProtect Management Client. Device settings can now be changed within the webpage without needing to leave the XProtect Management Client application.

For Panomera each of the 8 video channels link to the main overview sensor as this is used for device management. When a sub-sensor is selected, the webpage will open to the related sub sensors webpage on the Main sensors' webpage.



6.2.7 Microphone Device Settings

Only the Domera camera includes a microphone.



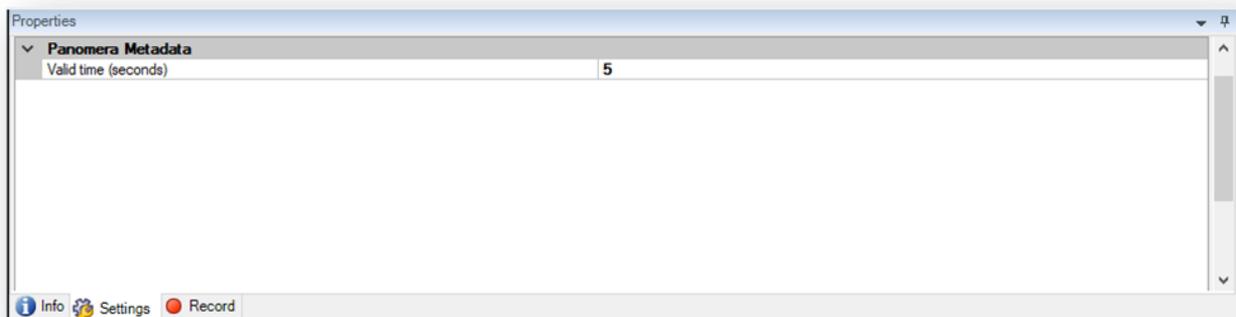
Main Profile

- Profile Name
 - o Predefined by the Profile type
- Transport
 - o RTP (UDP)
 - o RTSP (TCP)
 - o RTSPS (TCP with TLS)
 - o RTSP over HTTP
 - o RTSP over HTTPS

Same options available for **Secondary Profile**

6.2.8 Metadata Device Settings

This is available for both Panomera and Domera devices.



<Device> Metadata

- Valid time (seconds)
 - o A numeric value between 1 and 3600

6.2.9 Output Device Settings

Only available for Domera device; **Outputs 1- 8.**

-  Dallmeier Domera Driver (192.168.1.126) - Output 1
-  Dallmeier Domera Driver (192.168.1.126) - Output 2
-  Dallmeier Domera Driver (192.168.1.126) - Output 3
-  Dallmeier Domera Driver (192.168.1.126) - Output 4
-  Dallmeier Domera Driver (192.168.1.126) - Output 5
-  Dallmeier Domera Driver (192.168.1.126) - Output 6
-  Dallmeier Domera Driver (192.168.1.126) - Output 7
-  Dallmeier Domera Driver (192.168.1.126) - Output 8

No settings are available for this device.



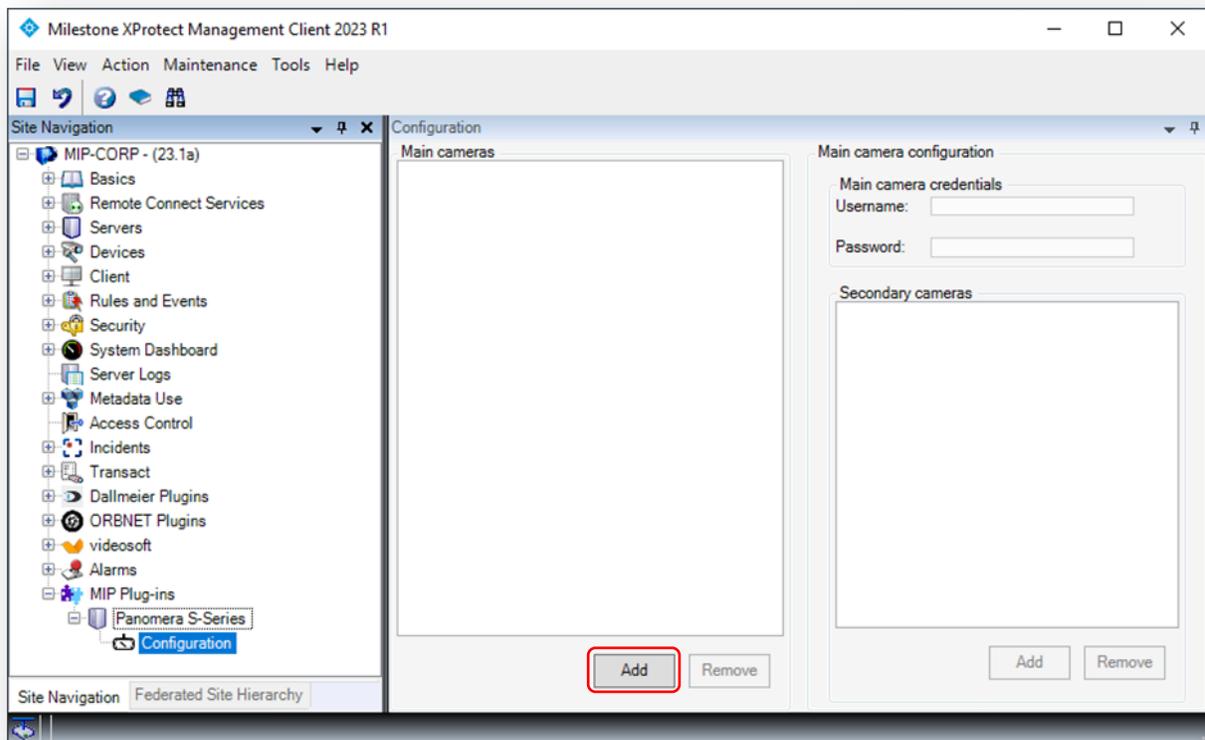
Outputs do not operate in this initial release. There will be an update in a future version of this plugin.

7 Setup of Panomera S-Series Plugin

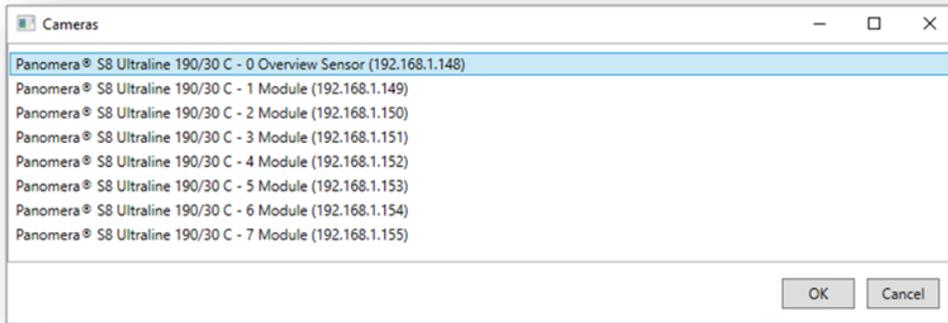
This section is required to operate Panomera devices in XProtect. This must be completed before devices can be configured with the Dallmeier plugins in the XProtect Smart Client.

7.1.1 Add Panomera camera modules to the Panomera S-Series plugin

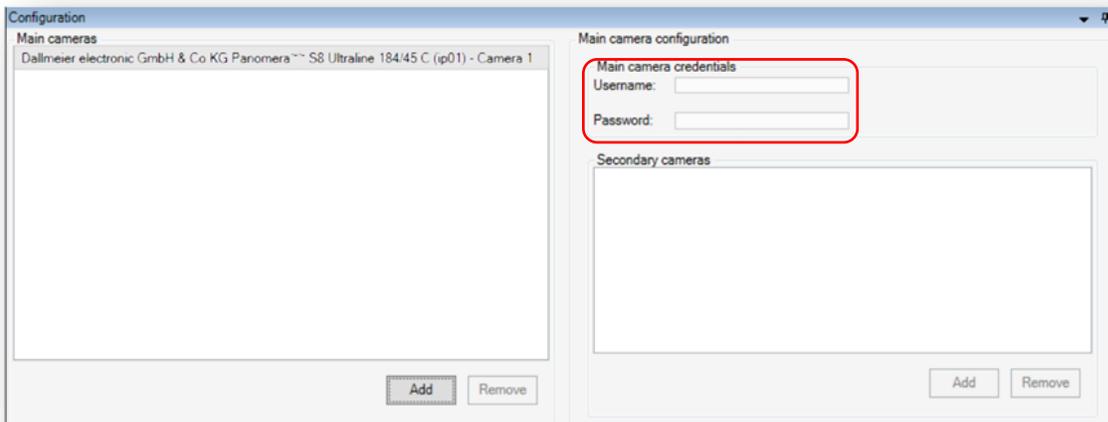
1. Open XProtect Management Client > Site Navigation > MIP Plug-ins > Panomera S-Series > Configuration.
2. Click Add in section Main cameras. A popup window Cameras is opened containing all available Panomera camera modules



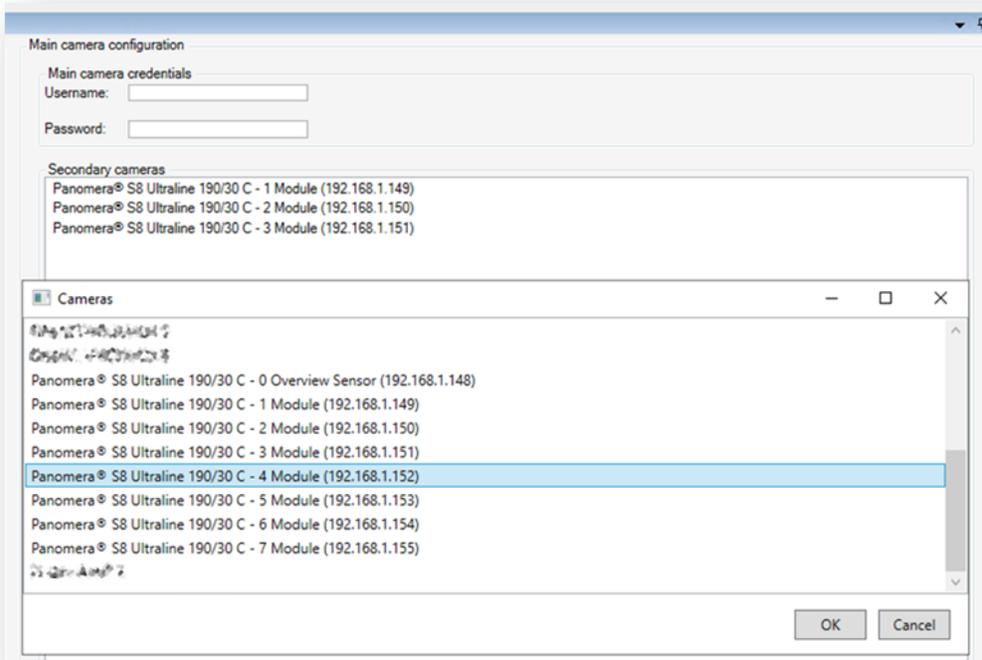
3. Select the Panomera camera main module and click OK (double click on the item performs the same action). The main module appears in the section Main cameras.



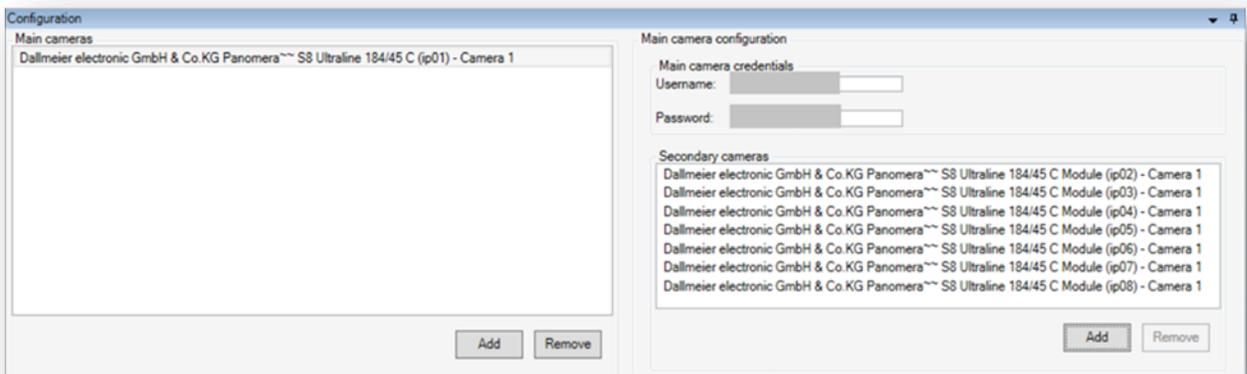
4. Click on the Panomera camera main module. Notice that the **Main camera credentials** (Username and Password fields) are now accessible. Insert the valid access credentials for the Panomera main module.



5. Click **Add** in section **Secondary cameras**. A popup window **Cameras** is opened containing all available Panomera camera modules.
Select the modules based on your requirements and click **OK** (double click on the item performs the same action). The **secondary cameras** section is now filled with the selection of sub-modules.

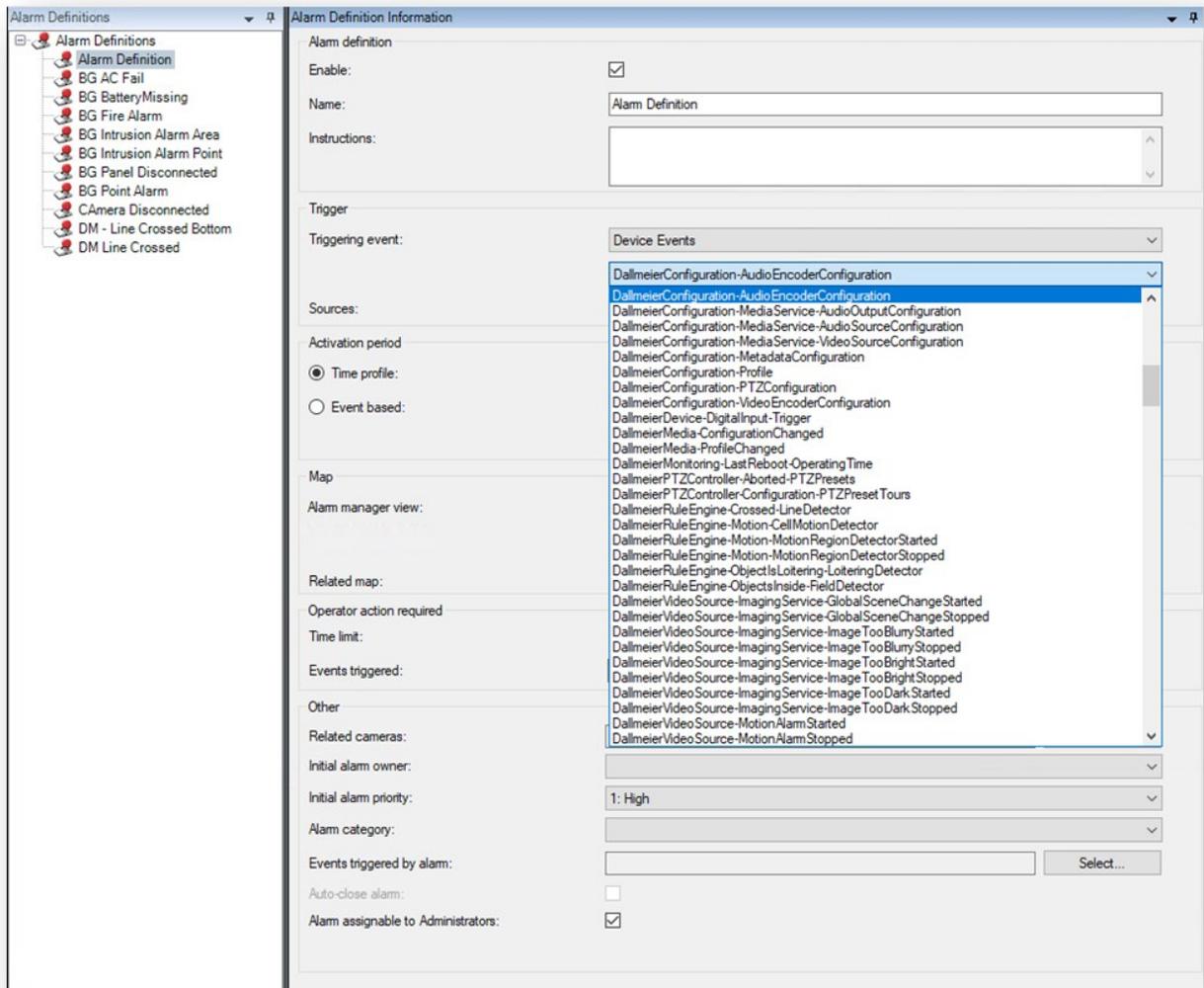


6. Click save in the main XProtect Management Client toolbar to save the configuration.



7.2 Alarm definitions

Alarm Definitions shown in the XProtect Management Client can be created with Dallmeier events. Access all available Dallmeier triggering events from Device Events. Ensure the event has been added to the relevant video channel event configuration and setup in the device.



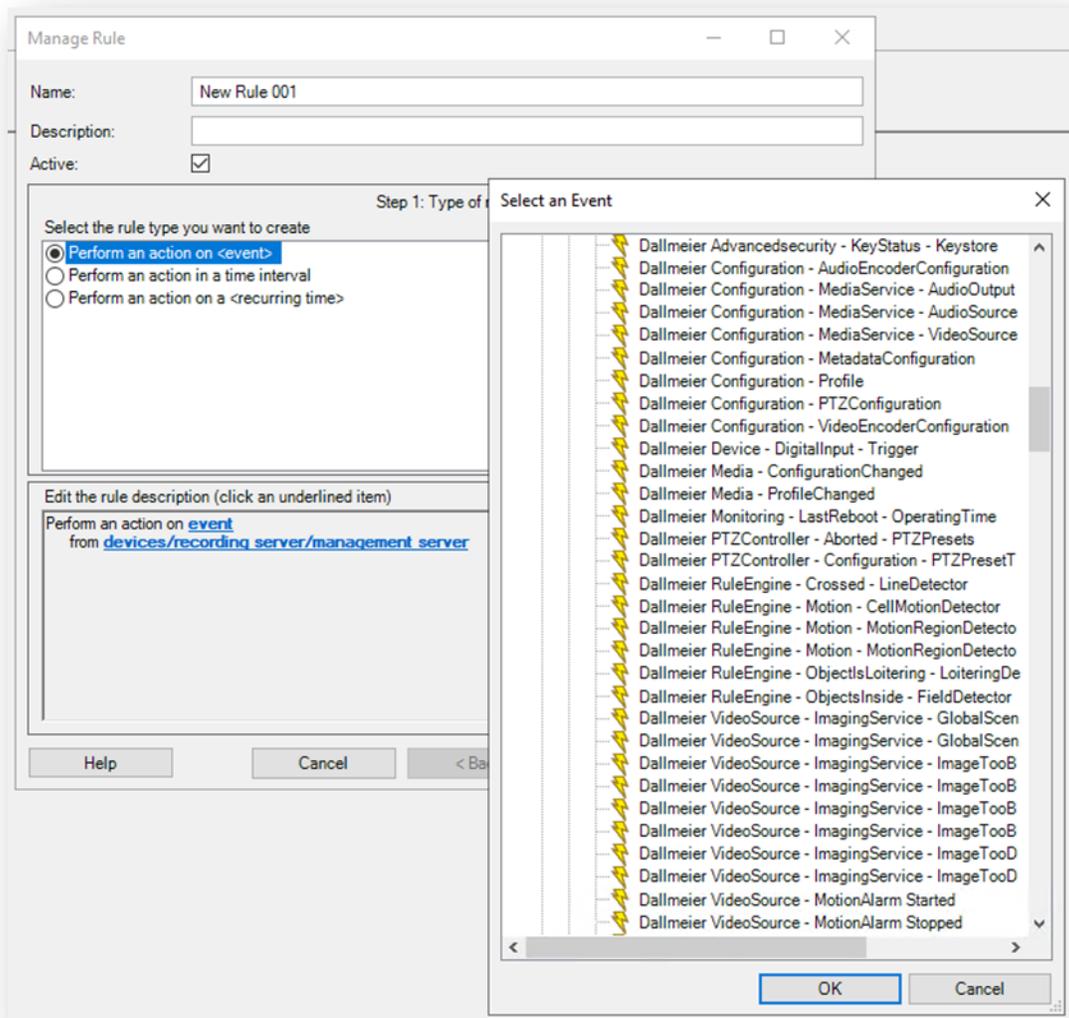
Select the relevant video source from the Sources list. More than one video source can be selected if required.



7.3 Dallmeier Integration Kit Events in XProtect Rules and Events

To access the Dallmeier Driver events in XProtect select the **Rules and Events > Rules** section in the XProtect Management Client and then right click in the center column to **Add new rule**.

1. Perform an action on <event>
2. Find Devices > Configurable Events
3. Find Dallmeier named events in this list



8 User Setup Guide

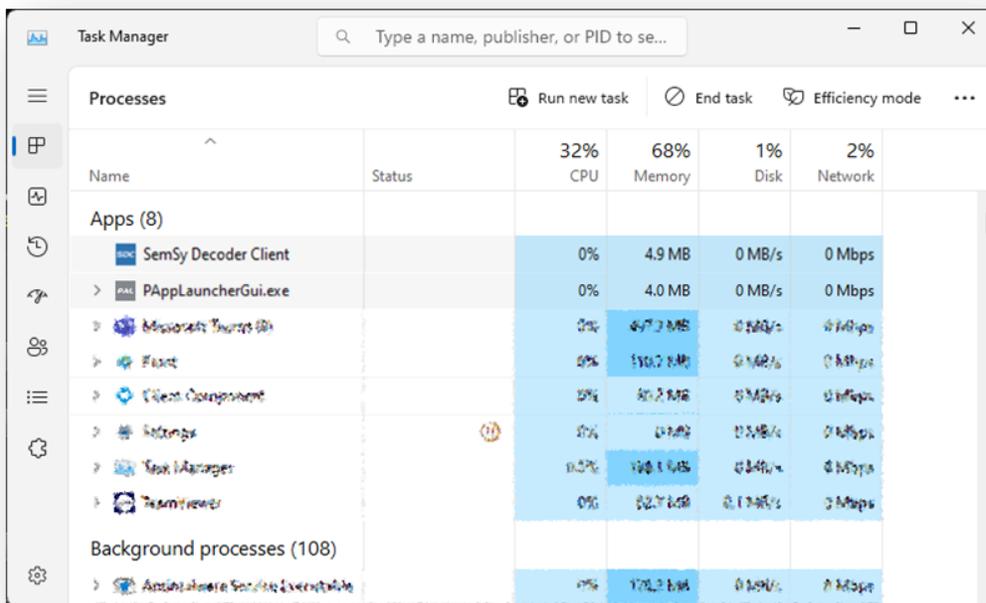
9 XProtect Smart Client

9.1 Dallmeier plugins explained

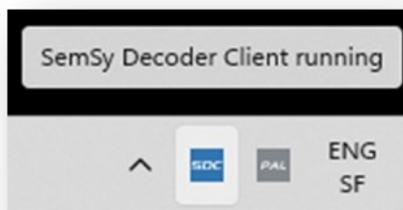
So, to prove all plugin installers have installed correctly and are running, first check for two running processes.

Open Task Manager and find;

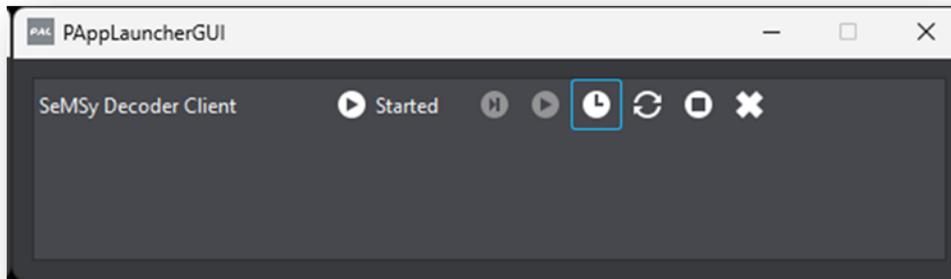
- SeMSy Decoder Client
- PAppLauncherGui.exe



Both applications show in the Windows taskbar. **[SDC]** for the SeMSy Decoder Client and **[PAL]** for the Papp Launcher applications.



By right clicking the [PAL] icon you can access the Papp Launcher interface, click **Control**. This allows control of the SeMSy Decoder Client service. For the XProtect Smart Client plugin to work correctly this should be running.



9.1.1 Dallmeier SeMSy Decoder Client

The SeMSy Decoder Client is used to display Dallmeier Panomera video in a single video tile. This switches between camera sensors when zooming in and out of the video image.



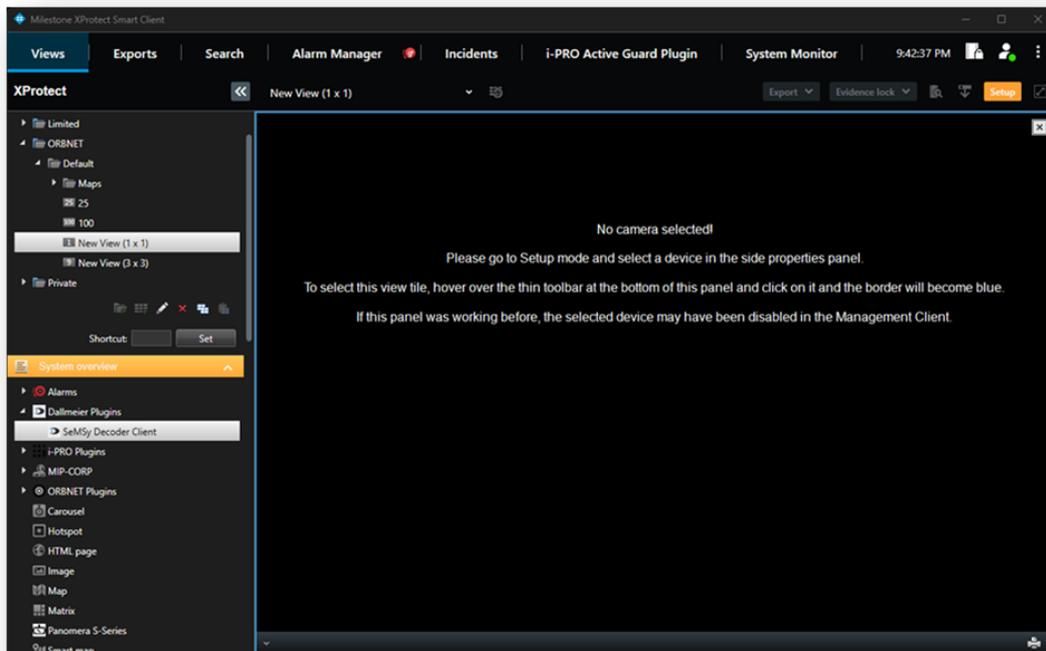
SeMSy Decoder Client does not work via Windows Remote Desktop.

9.1.2 PApp Launcher

The PApp Launcher appliance is used to ensure the Dallmeier SeMSy Decoder Client stays running on the XProtect Smart Client machine.

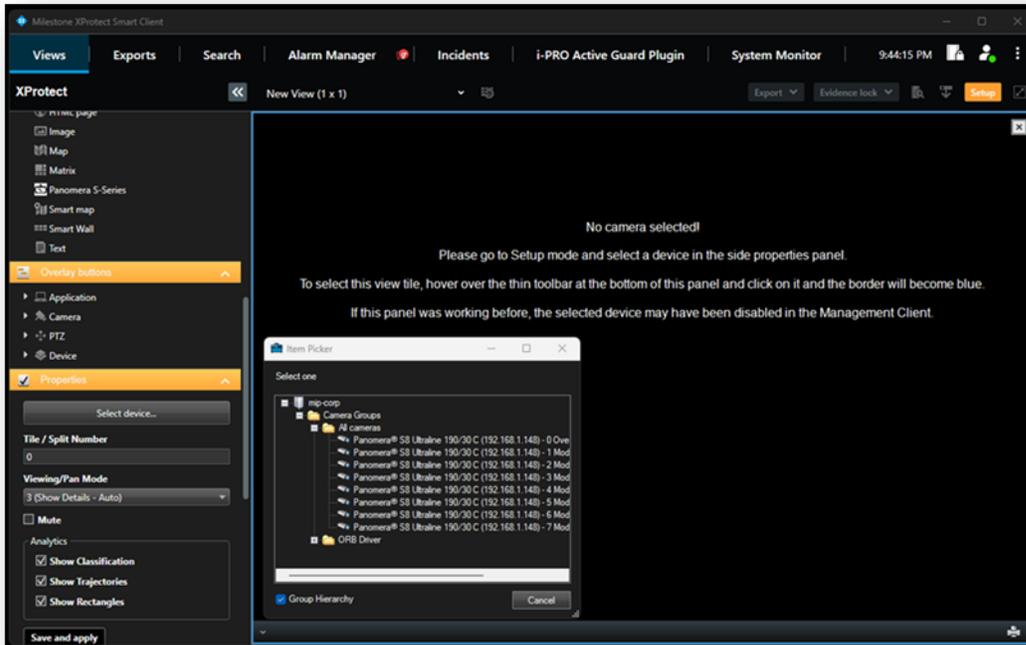
9.2 Dallmeier plugins setup

1. From the XProtect Smart Client enter **Setup** mode.
2. Create a new **View Group** and **View Layout** if required.
3. Under **System overview > Dallmeier Plugins > SeMSy Decoder** Click and drag this into an empty tile.
4. Initially this tile will show **“No camera selected”**, in the left-hand pane scroll down below System overview and Overlay buttons.

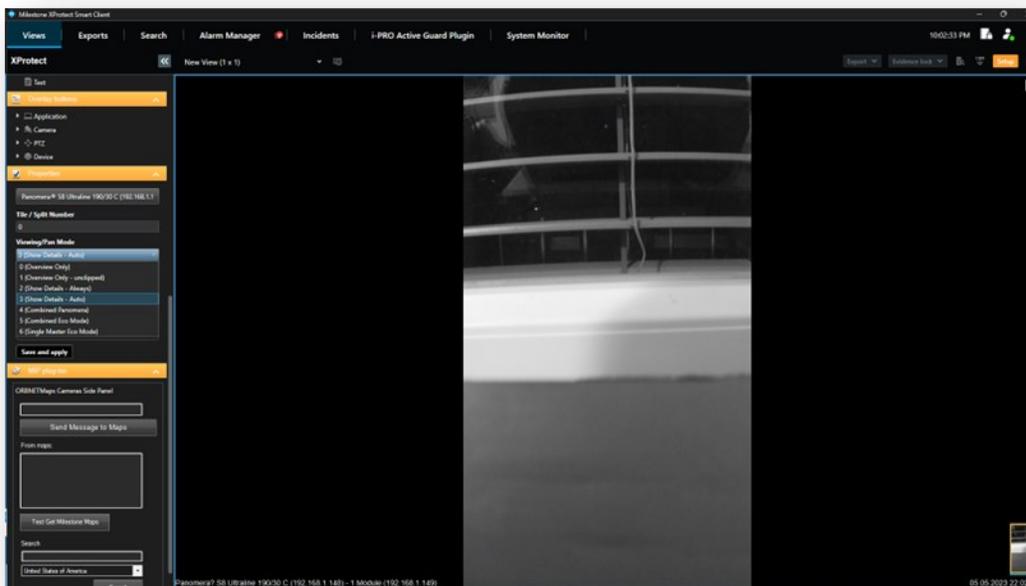


SeMSy Decoder Client does not work via Windows Remote Desktop.

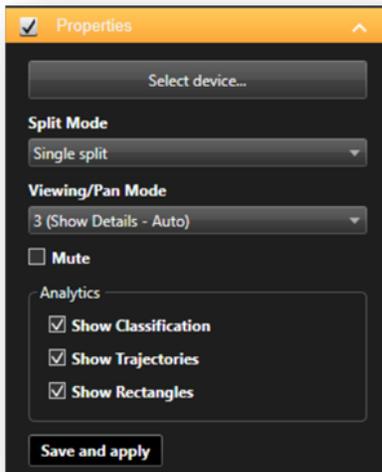
5. Under the **Properties** dialogue use **“Select device...”** an Item Picker will show.
6. Select a Dallmeier Panomera device, use the main / overview sensor for this.



7. The selected Dallmeier Panomera overview sensor from the Item Picker. This will now display the camera stream via the SeMSy Decoder Client in this window, even while still in Setup mode.



9.2.1 Plugin Properties



Select Device – This allows for the Dallmeier device to be added or updated for the selected tile.

Split mode – This allows for the window to be split layouts. Single and Main view with sub views.

Options:

- Single split
- 1 big, 3 small (on the right)
- 1 big, 2 small (on the right)
- 1 big, 2 small (on the bottom)

Mute – When ticked, camera audio will be prevented from playing

Analytics – For devices with support and a setup analytic module within the Dallmeier device.

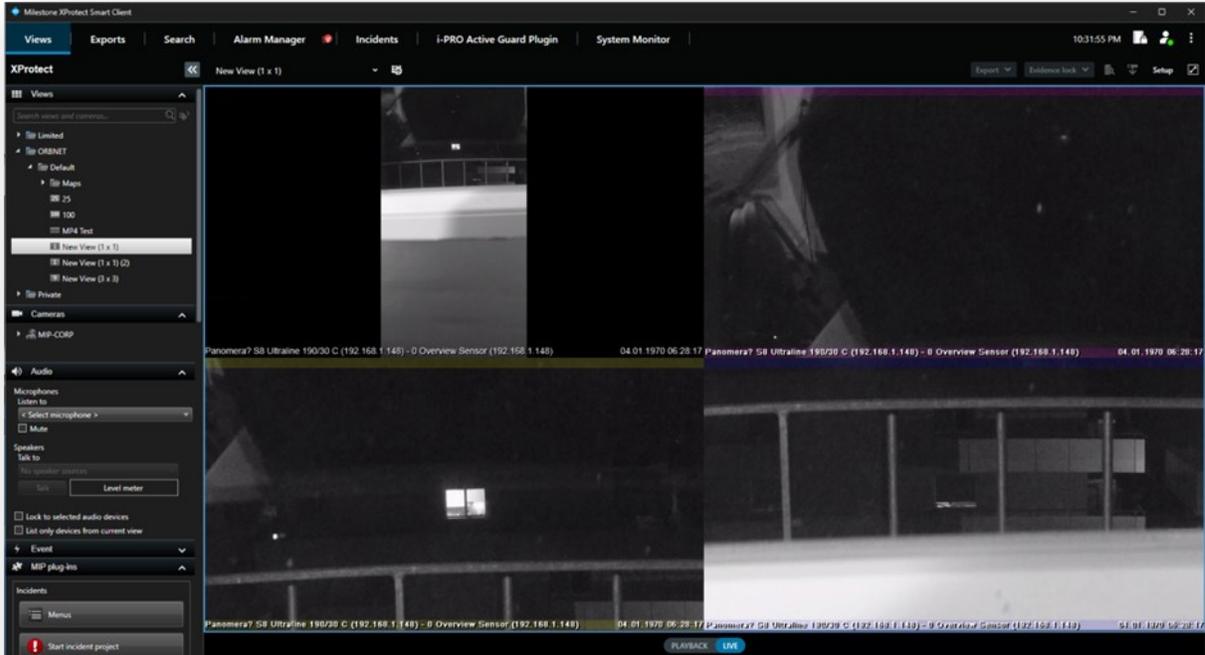
Options:

- Show Classification
- Show Trajectories
- Show Rectangles

Save and apply – When making any changes this must be clicked to apply a setting change.

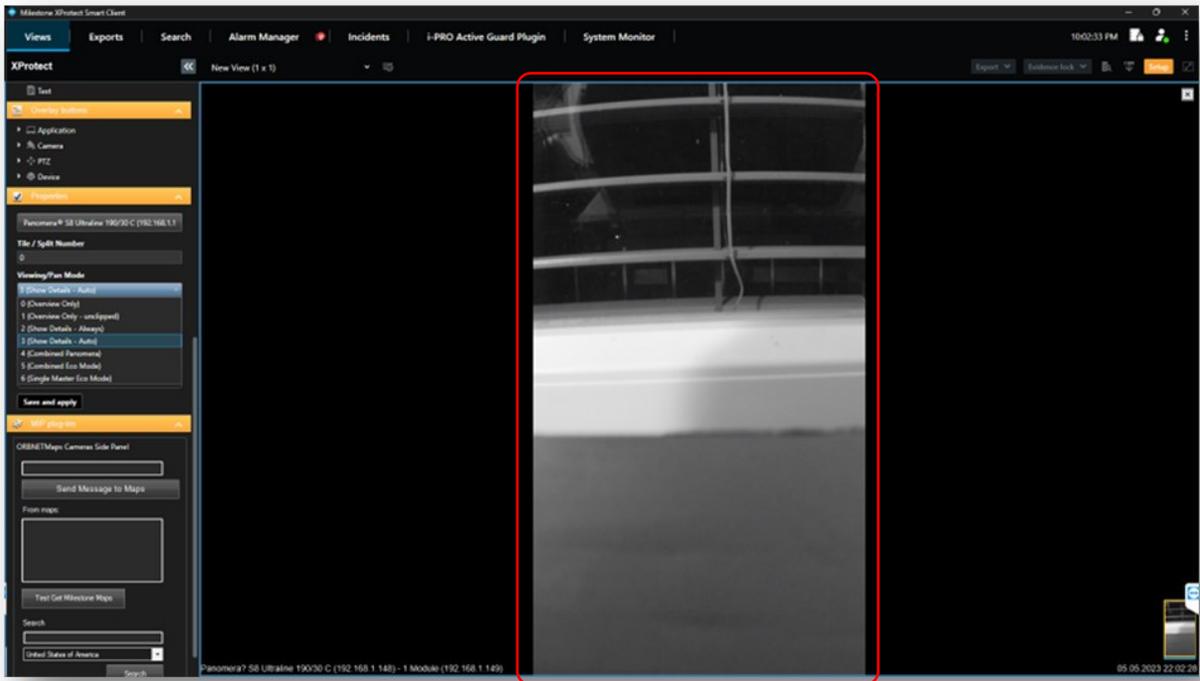
Below is an example of the split layout 1 Big, 3 Small.

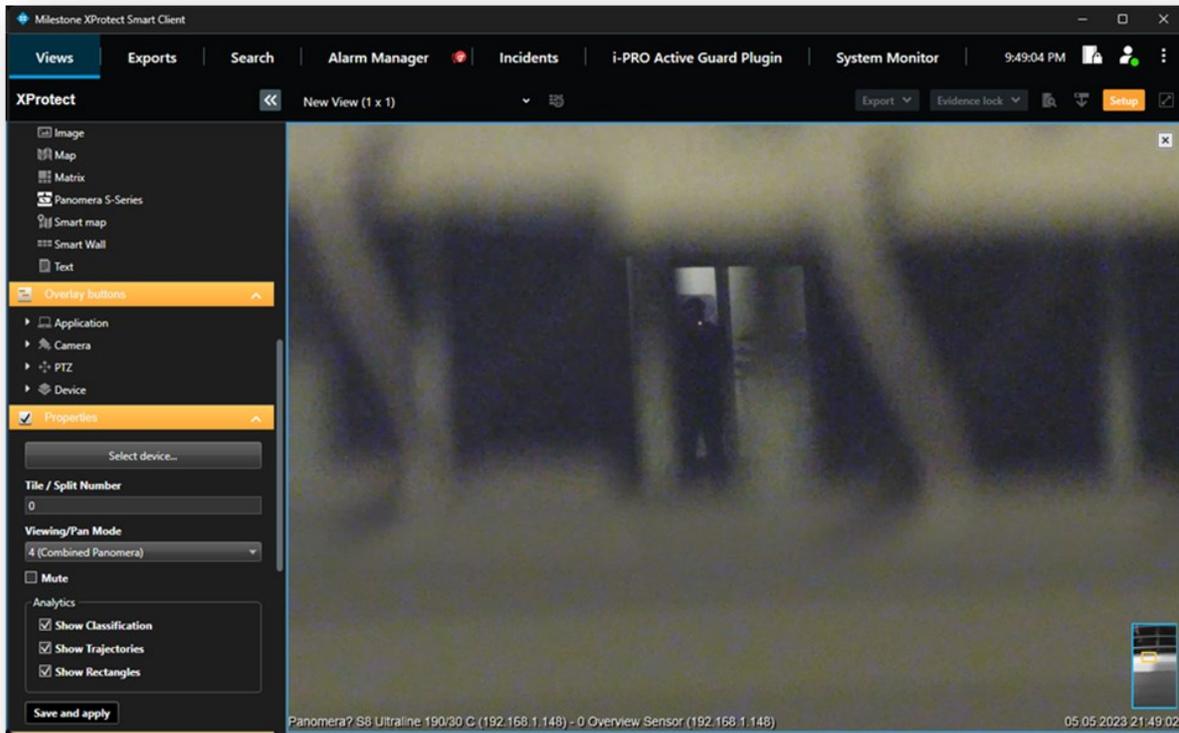
From the main overview, click the center rollerball within the image to open the relevant area closeup sensor on one of the other display windows.



9.3 Dallmeier plugins operation

1. Exit Setup mode. Ensure you are in the XProtect Smart Client Views tab with Live selected or Live tab depending on the XProtect Smart Client version.
2. With the mouse over the video image use the mouse scroll wheel to zoom into the image. Once past 50% the displayed image sensor will be updated to the secondary detailed view for this area.





3. In the bottom right corner of the video stream an overview image is shown with the currently view location highlighted in yellow.



4. The highlighted yellow section can be clicked and dragged around the overview; this updates the area of current view to the new location as moved.

9.4 Dallmeier Integration Kit - Playback Mode

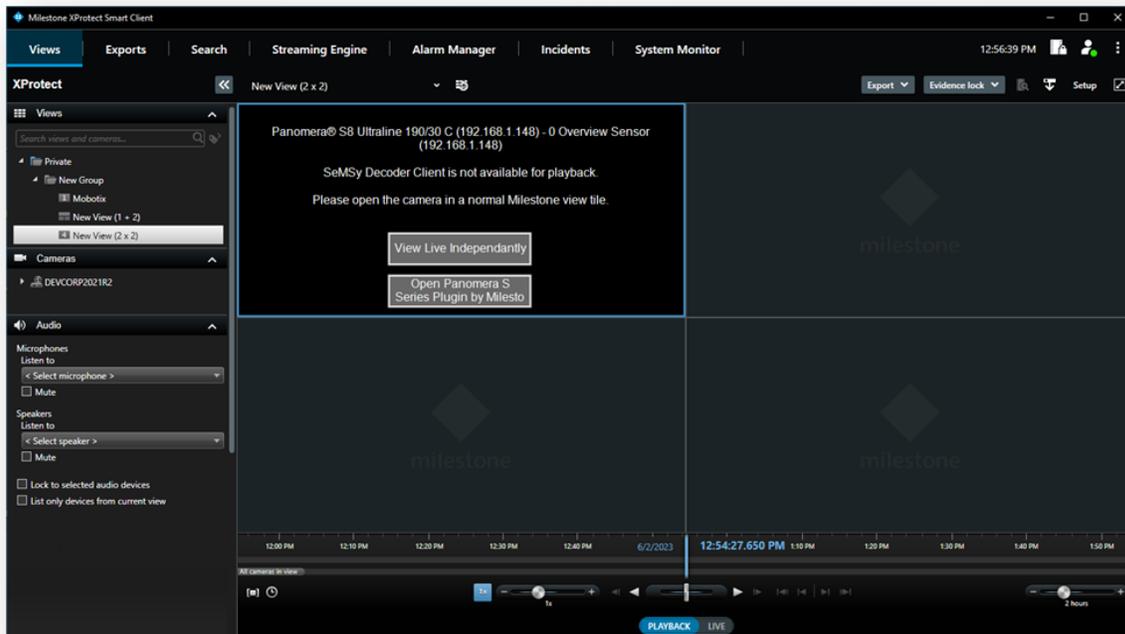


Accessing playback in the XProtect Smart Client has transitioned as of version 2023 R1. This application has been tested with both 2023 R1 and 2022 R3 interfaces.

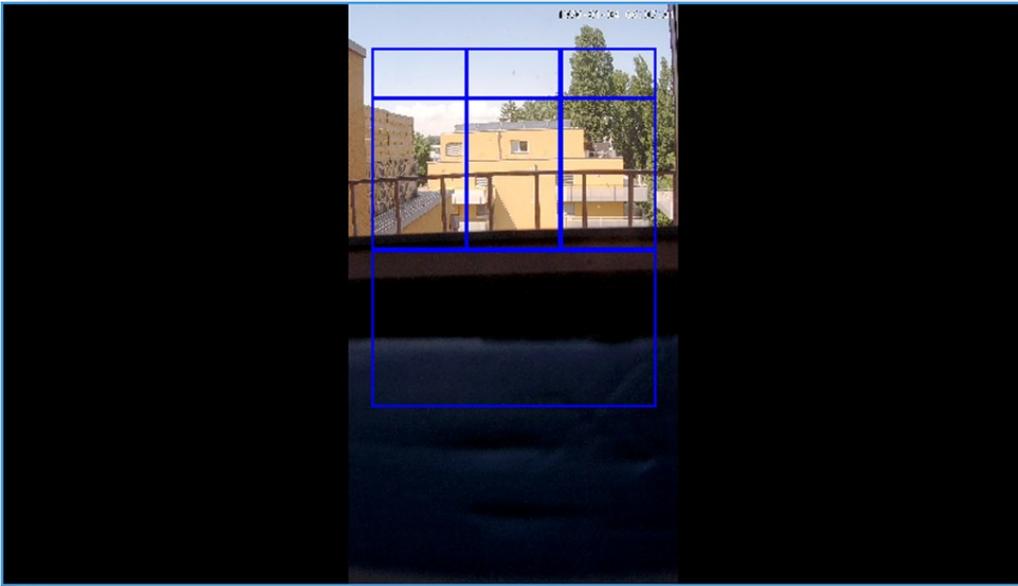


The recommended view layout for Playback is a 4Way or 9Way tile layout. The blank tiles get used alongside the Panomera S Series plugin by Milestone in playback mode.

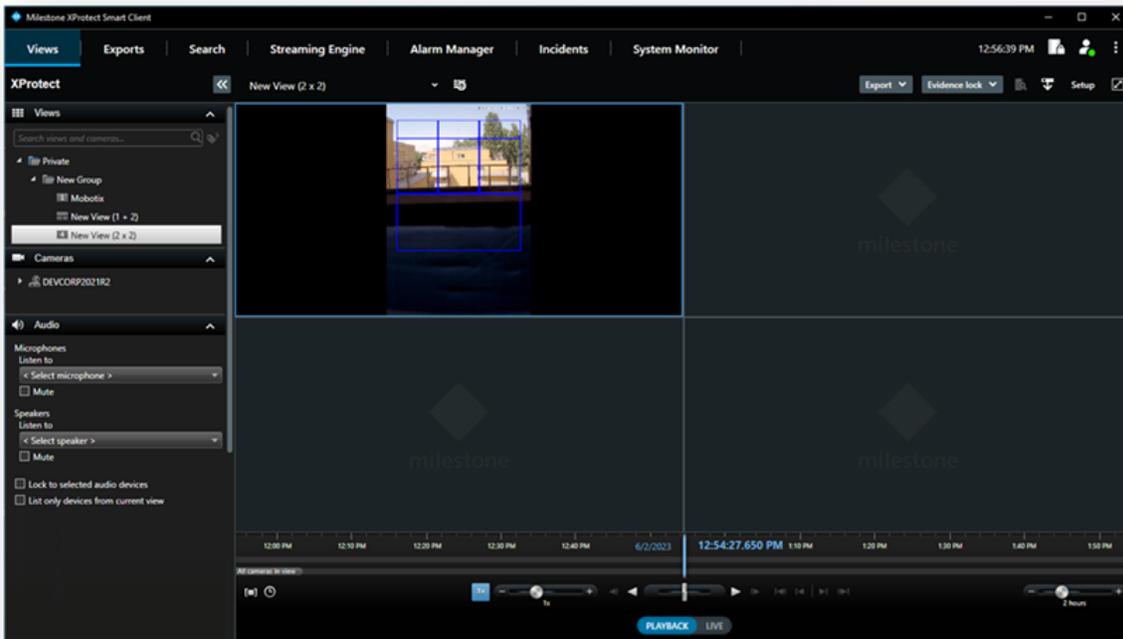
1. First select **Playback** from your XProtect Smart Client
2. The window will update as below to display the below options.
 - **View Live Independently**
 - o This takes you back to the SeMSy Decoder view, this view does not support playback
 - **Open Panomera S Series plugin by Milestone**
 - o This changes the tile to the S Series Plugin that has support for playback
3. Click and select **Open Panomera S Series plugin by Milestone**



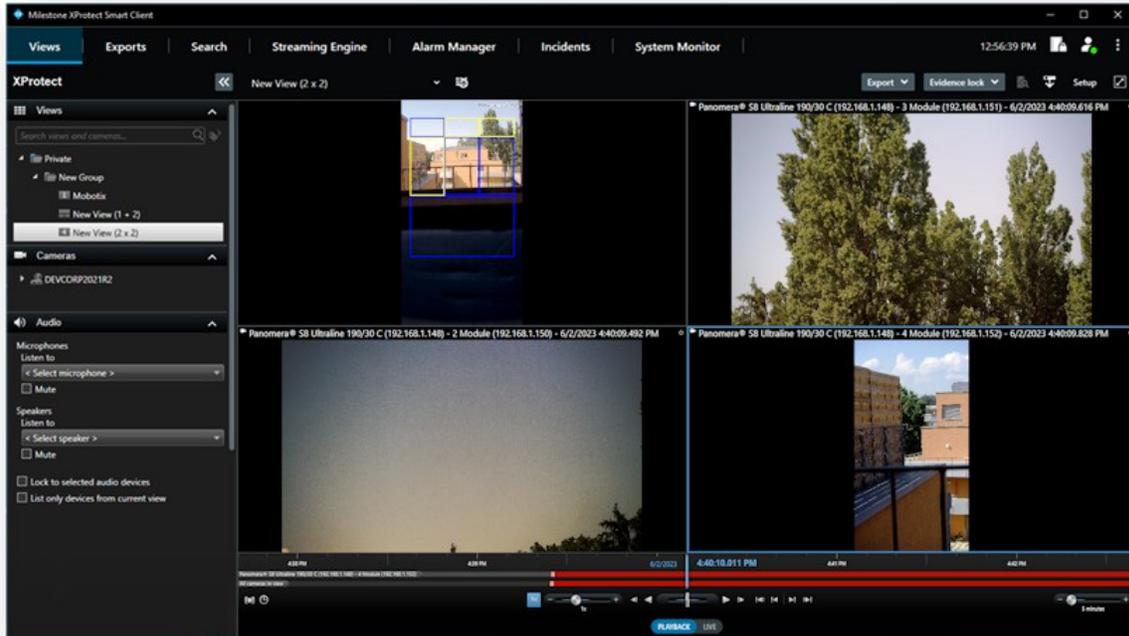
4. The tile will now display a stream with seven blue boxes. This makes up the seven far sensors and the stream displayed is the overview.



5. It is now possible to playback, but the Timeline will not show recordings or export.



6. Left click and hold with your mouse on the inside of a blue square and drag into a spare blank tile. The tile will update with the relevant area sub sensor. The Timeline will update and show recordings where available.



10 Known Limitations

10.1.1 Adaptive Streaming.

Not currently implemented in the SDK driver framework.

10.1.2 Remote Retrieval

Planned for the next release of this XProtect Integration Kit.

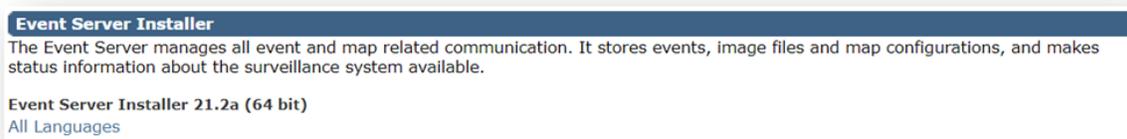
11 Troubleshooting

11.1.1 XProtect Event Server Installation

If XProtect was installed via a custom installation, the XProtect Event Server may not have been included, as it is not always required.

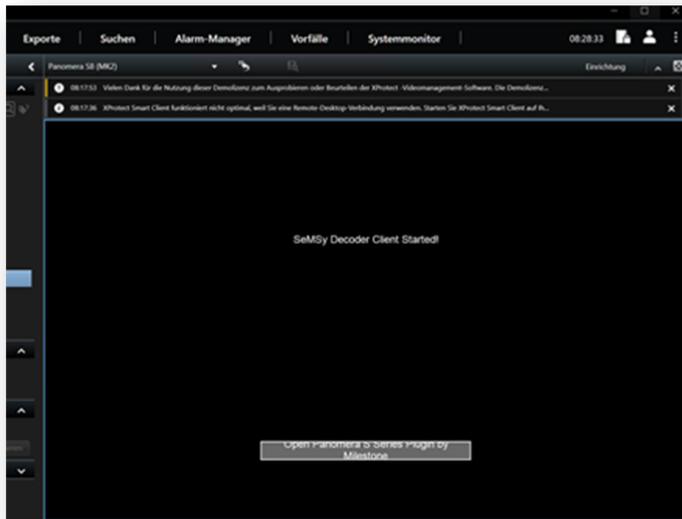
From the server/machine with the XProtect Management Service navigate to <http://localhost/installation/admin/default-en-US.htm>

This will show a XProtect installation page where you will be able to run the installer for the XProtect Event Server. This must be installed so the plugin can communicate with Milestone XProtect.



11.1.2 No Video shown – SeMSy Decoder Client Started

When the message **SeMSy Decoder Client Started!** Does not disappear after 20 seconds.



1. Check if the SeMSy Decoder Client is installed. Check the installation steps for the XProtect Smart Client plugins [here](#) or check [SeMSy Decoder Client – Not Found](#).
2. Check that the SeMSy Decoder Client is running, follow the instructions [here](#).