

innovi - Milestone XProtect Integration Guide

Version: 13-Jun-2022

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1. Integration Overview

Integration of Milestone's XProtect with Agent Vi's innovi offering provides a video analytics solution in which events of interest are detected through real-time analysis of multiple video sources and sent as alarms to Milestone XProtect Smart Client.

1.1. About this Guide

This guide outlines how to deploy and configure the integration of Agent Vi's innovi solution and Milestone XProtect system

1.2. Supported Milestone XProtect Editions & Versions

innovi integration aligns with your Milestone XProtect deployment to support your needs. It supports the use of Milestone XProtect XPE, Milestone XProtect XPCO and also Milestone Open Network Bridge deployment.

Check this page (https://www.agentvi.com/supported_vms/) for supported Milestone XProtect versions.

1.3. Support for Milestone Interconnect

Milestone Interconnect is a central surveillance hub allowing integration of smaller, remote Milestone XProtect installations. Thus, it serves as a central site for video stream access. Integrated with the innovi analytics solution, you can receive a centralized view of the innovi alarms from dispersed Milestone sites (individually integrated to innovi) in your Milestone Interconnect smart client tool. For more details, refer to Milestone Documentation:

https://doc.milestonesys.com/latest/en-US/feature_flags/ff_interconnectedproducts/mc_configuringmilinterconnect.htm?TocPath=XProtect%20VMS%20products|XProtect%20VMS%20administrator%20manual|Configuration|_29

1.4. Time Synchronization

innovi provides time synchronization options that are also supported as part of the Milestone XProtect integration. Detected events in innovi can be synced to one of the following:

- Detected events synced to the innovi Edge device time – syncs Milestone XProtect cameras with the innovi Edge device timing. Relevant for Milestone XProtect when Open Network Bridge is not deployed.
- **Recommended:** Detected events synced to the video stream time (when available) – supported for Milestone Open Network Bridge deployed cameras. This method provides the best sync between innovi and Milestone XProtect.

NOTE: For more information on Milestone Open Network Bridge solution, refer to this documentation: https://doc.milestonesys.com/latest/en-US/portal/htm/chapter-page-onvif.htm?tocpath=Third-party%20integrations%7CMilestone%20Open%20Network%20Bridge%7C_____0

2. Map Cameras

➤ Before you start

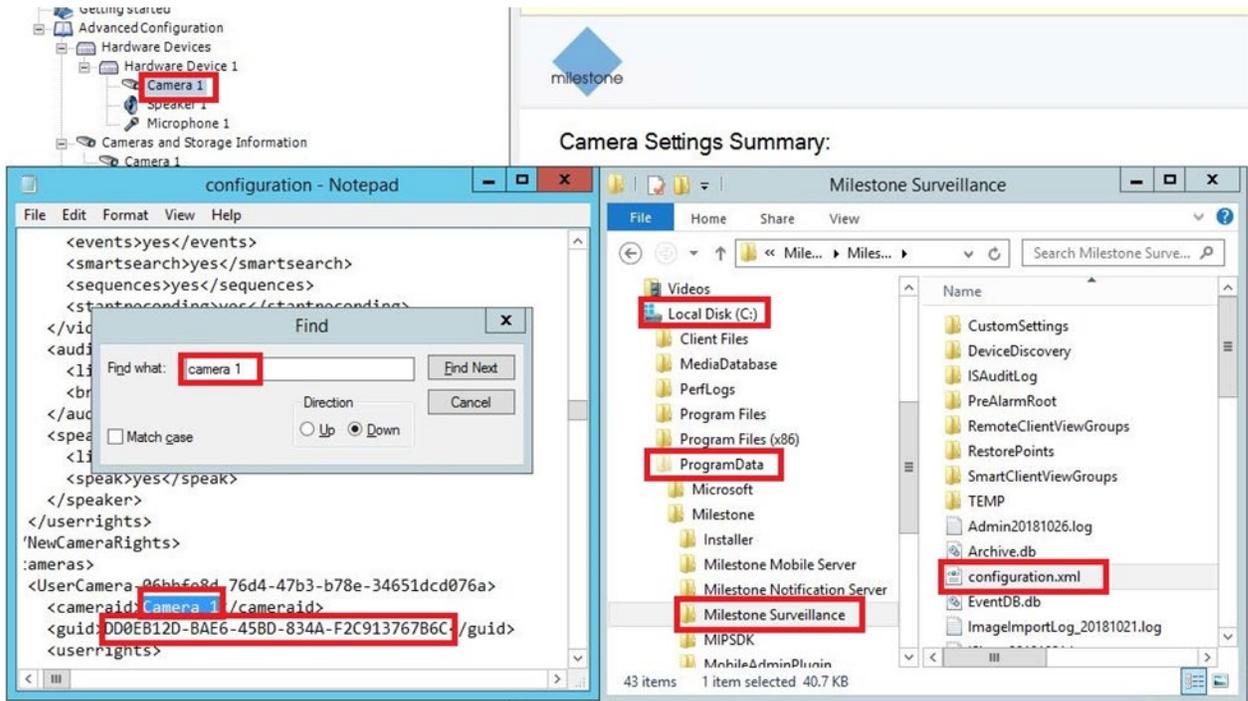
The innovi-Milestone XProtect integration targets cameras (or rather the camera's video streams) defined in Milestone XProtect and maps them to innovi. This mapping procedure means that the camera must be defined in innovi and that the Camera's ID often named GUID (Globally Unique Identifier) in Milestone is required to identify and link the camera in innovi. In this way, the MIP Plugin can identify the source cameras and their detected events.

This procedure also supports Milestone Interconnect. When retrieving the camera's GUID, make sure to do so for the relevant Milestone Interconnect version and tools.

➤ To retrieve the camera ID, perform the following:

XProtect Professional+

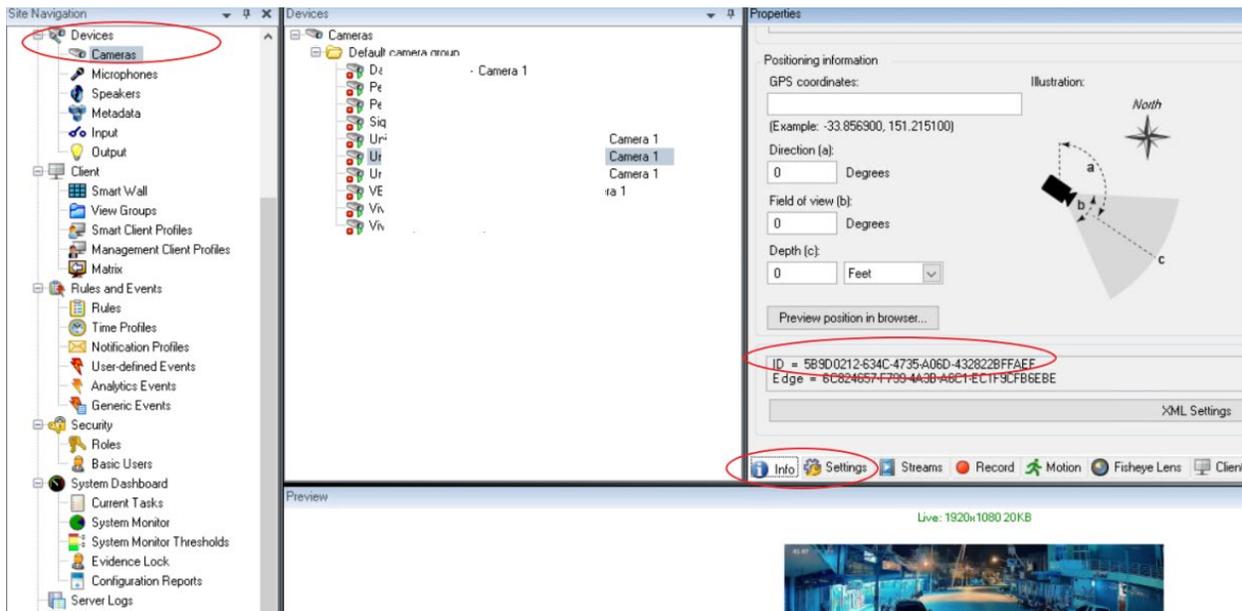
1. Open configuration.xml file located in ProgramData/Milestone/Milestone Surveillance/configuration.xml on Milestone server
2. Search for the camera name in the configuration.xml file
3. The camera GUID is shown beneath the camera name:



4. Copy the details and keep for use later in innovi Portal
5. Perform the step for all the relevant cameras

XProtect Corporate

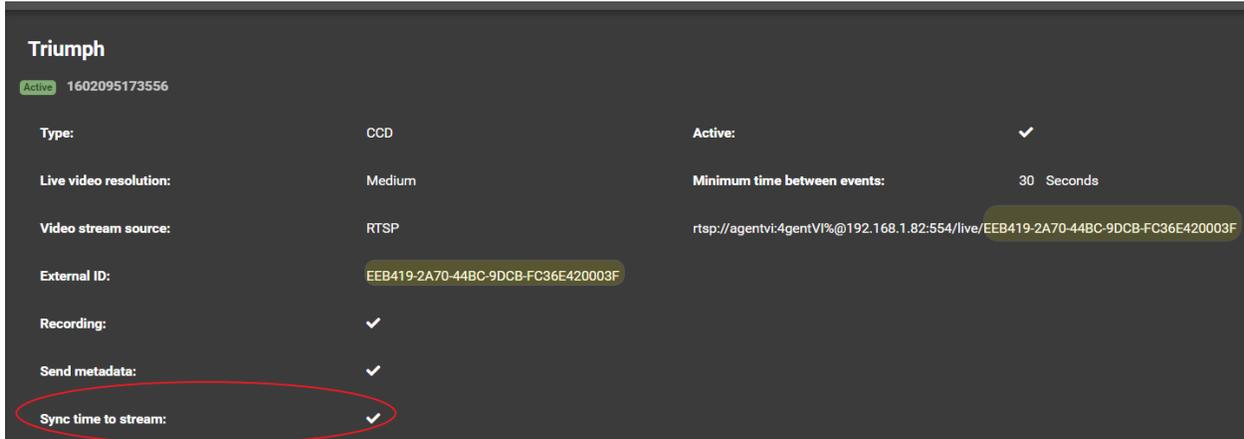
1. In the Milestone Management Client site navigation, select **Devices > Cameras**
2. Select the relevant camera, and select its **Settings** tab
3. Press the CTRL key and while pressing down move to **Info** tab. The camera ID details appear
4. Copy the details and keep for use later in innovi Portal
5. Perform the step for all the relevant cameras



6. Open the innoVi Portal and find the relevant camera
7. In the camera's **Settings** tab, click the **Edit** button
8. In the External ID field, enter the camera ID you retrieved for this camera in the Milestone Management Client. This field is case-sensitive so ensure the camera ID is entered exactly as it was acquired from Milestone
9. **For Milestone Interconnect deployment**, enter the Interconnect specific camera ID in the External ID Field. If this is being added as additional support on top of the Milestone XProtect VMS, then separate the two entries with a comma
10. **For Open Network Bridge deployment only**, use the following URI format in the Video Stream Source field:
rtsp://[user name]:[password]@[Open Network Bridge server IP
or
[hostname]:[Open Network Bridge RTSP port]/live/[camera ID]

To learn more, watch this Milestone tutorial: <https://www.youtube.com/watch?v=-LIRbga2LOk>

Note: Use the user and password defined in the Management Client for the Open Network Bridge deployment. For camera ID, use the same Camera ID as the one entered in External ID field. Ensure the camera ID is entered exactly as it was acquired from Milestone.



11. For Open Network Bridge deployment only, ensure that the **Sync time to stream** toggle switch is enabled. See image above.

3. Enable Milestone XProtect Integration in innovi Portal

➤ **Before you start**

This section describes how to create an innovi service account and token in innovi Portal to later link to the Milestone management client.

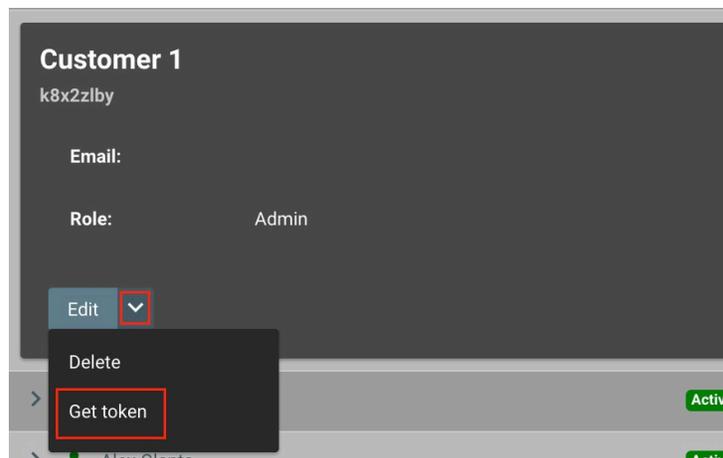
These steps assume that your innovi account has been set up and that folders, devices and cameras have been configured. If that is not the case, first access innovi tutorials from the innovi Support hub to configure your account.

In innovi, a service account is required in order to later link the Milestone XProtect MIP Plugin to innovi. The innovi service account provides a token, which is the identifier used to link the innovi account to the MIP Plugin.

If connecting multiple innovi accounts to a single Milestone VMS deployment, this procedure must be performed for each innovi account.

➤ **To generate innovi Service Account token, perform the following:**

12. Browse to your innovi account, **Settings** tab
13. Click the **Users** tab
14. Click the **Add** button, select **Service Account**.
15. Enter a meaningful Service Account name such as “Customer 1”. Enter a description (optional).
16. Click **Create Service Account**.
17. From the users list, select the created Service Account user, click the arrow next to the **Edit** button and select **Get Token**



18. Define token expiration if required (by default token never expires)
19. Click **Get token** and note the generated token (to be used in the Event Monitoring MIP plugin configuration):

4. Install and Configure innovi Event Monitoring MIP Plugin

The integration of innovi and XProtect, based on the Milestone Integration Platform (MIP), offers these benefits:

- Simple to configure. It takes just a few steps to be able to receive events for any number of cameras and any number of analytics rules per camera
- You can view past events, navigate to a video recording of a specific event, and view analytics tracking for that event

*Note: To receive innovi events in Milestone, make sure that all Milestone Event Server machines and/or Milestone Management Client machines have outbound TCP access to *.innovi.io:443*

4.1. Download and Install innovi Event Monitoring MIP Plugin

➤ **Before you start:**

Install the innovi Event Monitoring MIP Plugin on *all* PCs hosting:

- Milestone XProtect Event Server
- Milestone Client (Management or Smart Client)
- Milestone Interconnect server and management applications

Note: If an earlier version of the Event Monitoring MIP Plugin is already installed, install the new version on top of it (i.e., upgrade).

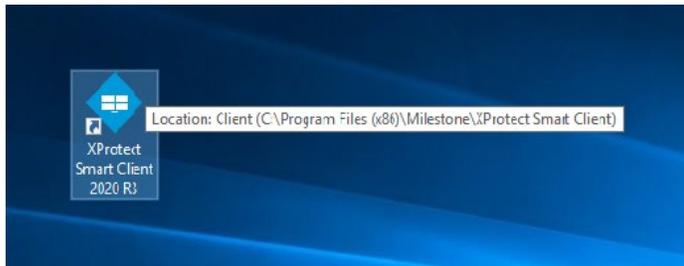
- To install the innoVi Event Monitoring MIP Plugin (or upgrade from a previous version), do the following:

1. Close Milestone's Management Client application

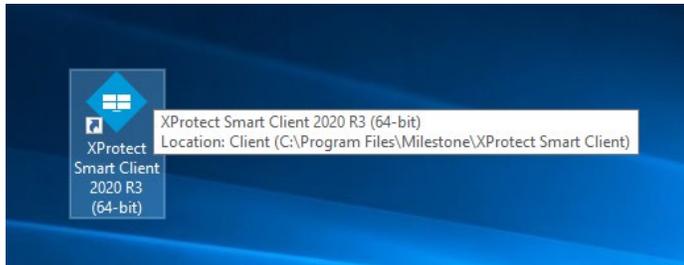
Download the latest plugin version from this page: <https://www.agentvi.com/innovi-software-components/>

Identify your Milestone Smart Client version:

32-Bit:



64-Bit:



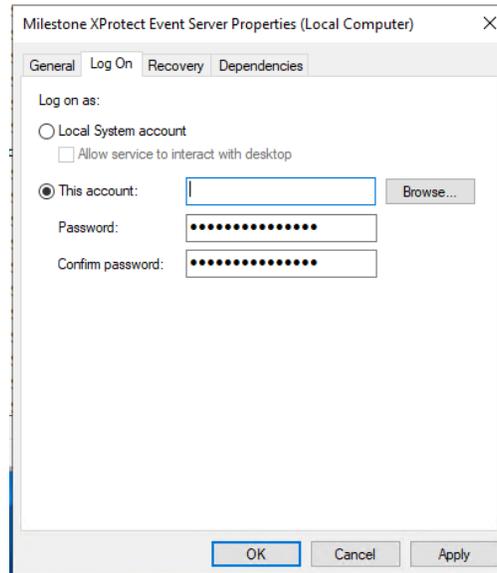
The zip file contains the two plugin versions:

- 32-bit (x86)
 - 64-bit (x64)
2. Select the version relevant for your client. Run the innoVi Event Monitoring MIP Plugin install wizard. Follow the instructions until the installation is completed

For initial installation:

3. The Event Server service should be run with an Administrator user

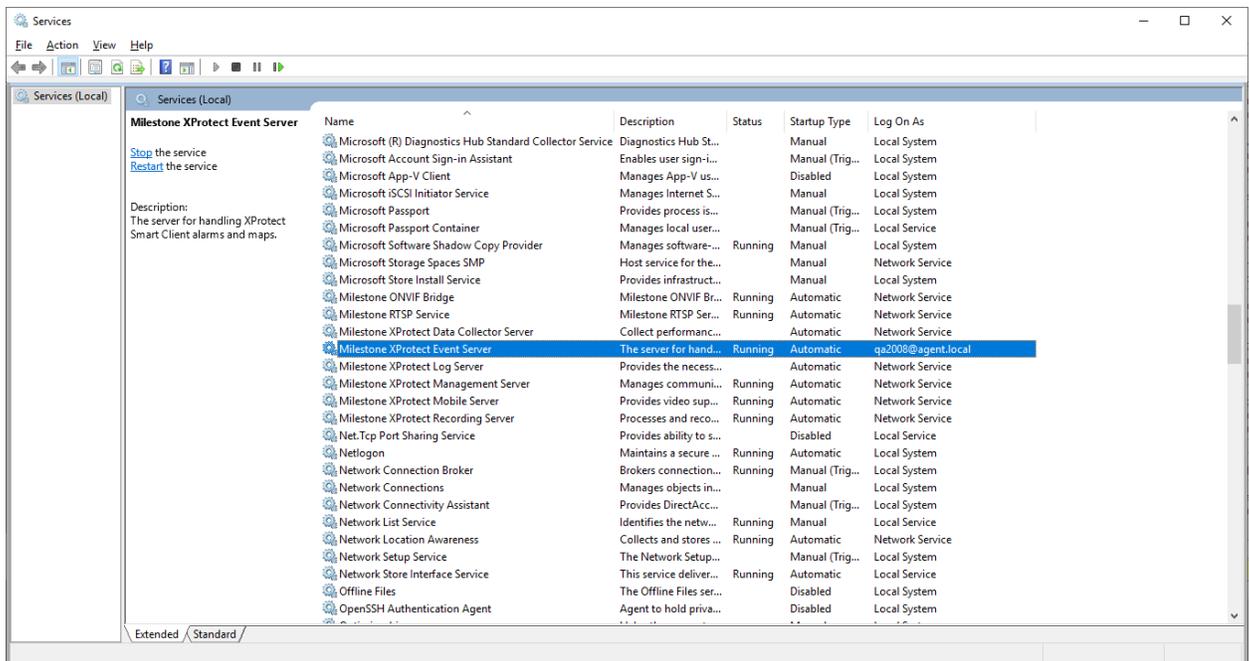
In the Properties tab of the Event Server service, select the Log On tab and check the **This account** radio button.



Click Browse and navigate to a user privileged to log as Administrator. Populate the Password fields as required.

Click **OK**.

Open the windows **Services** panel and restart the **Milestone XProtect Event Server Service**.



4. Open Milestone's client applications as required

4.2. Initialize innoVi in Milestone Management Client

The innoVi - Milestone integration supports the following methods:

- **innoVi Core**
 - Send analytics events and events' overlay from innoVi Core to Milestone
 - Send health events from innoVi Core to Milestone
- **innoVi Edge**
 - Send analytics events from innoVi Edge to Milestone.
 - Live overlay is available in Milestone Smart Client.
 - When Core is available
 - Events' overlay is available in Milestone Smart Client
 - When Core is NOT available
 - Events' overlay is available in Milestone Smart Client for 4 seconds before the event time

Notes:

1. The purpose of this option (core not available) is to enable continued support of events' transfer to Milestone, if the core is not available for **short-time periods**
2. If the Edge Device is restarted for any reason while the core is not available, the connection to the cameras is lost. The core must be available to renew connection
3. Schedules for rules are updated in the Edge Device every 24 hours. If the core is not available for more than 24 hours, the Edge Device stops generating events

Requirements for innovi Edge integration:

- If the Smart Client is installed on the Milestone server, run Milestone Smart Client as administrator (In the Properties / Logon tab of the Milestone Event Server service, select an administrator user). If it is installed on a separate computer, you can run as a standard user
- External ID changes

Changes in camera External ID can be made in Milestone and/or in innovi. Do the following:

- Change in Milestone: restart Milestone Event Server service to review the change immediately or wait up to 15 minutes and the change will take effect
- Change in innovi: restart Milestone Event Server service to review the change

Close and re-open the Milestone Smart Client

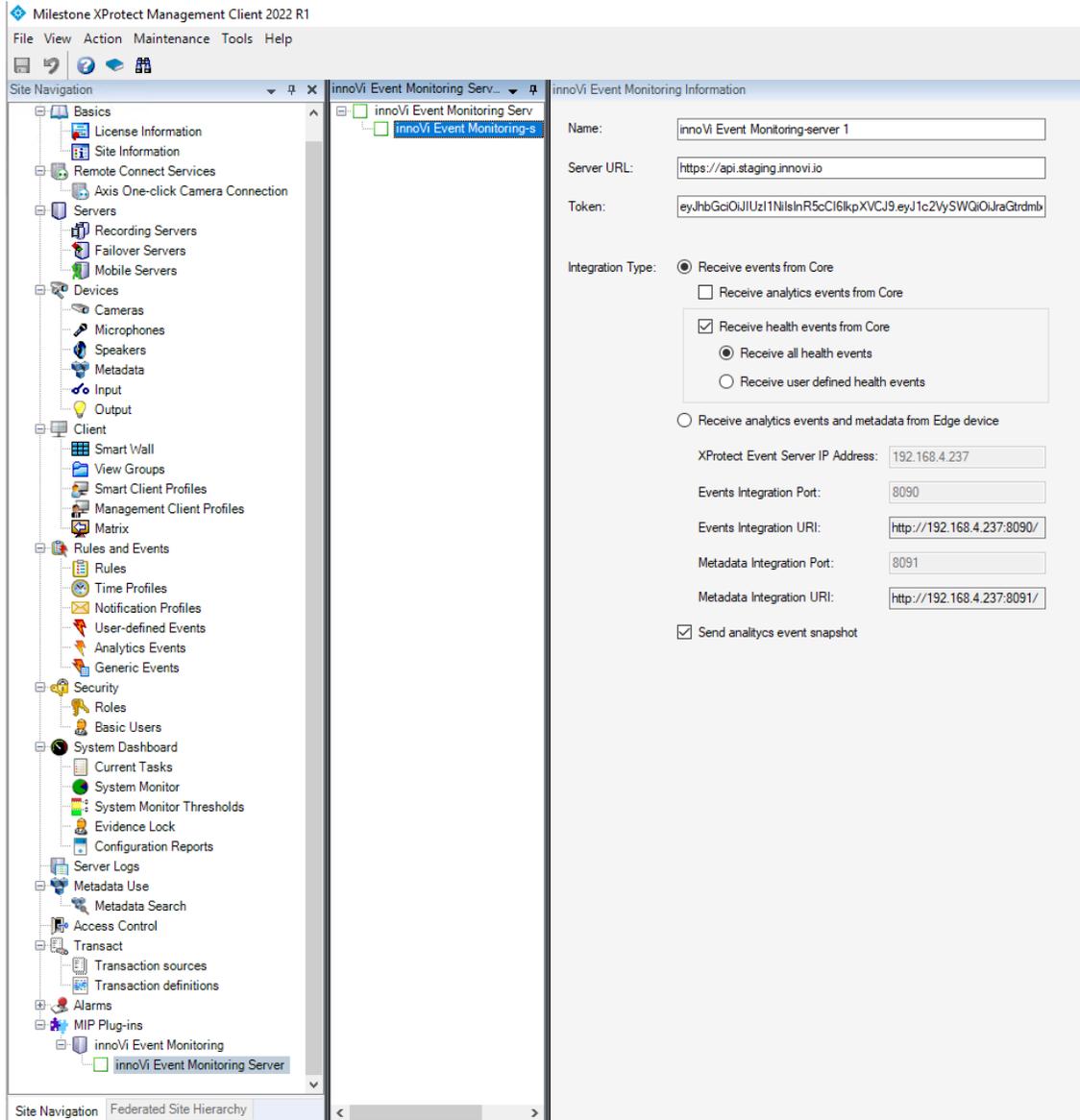
- Following a change of integration type (innovi Core / innovi Edge), restart Milestone Event Server service and Close and re-open the Milestone Smart Client

➤ **To initialize the integration, do the following:**

1. Open the Milestone Management Client
2. In the navigation tree, expand **MIP Plug-ins** → **innovi Event Monitoring**
3. Right-click **innovi Event Monitoring server** and select **Add New...**

Note: If connecting multiple innovi accounts to a single Milestone VMS deployment, perform this step and following steps per innovi account.

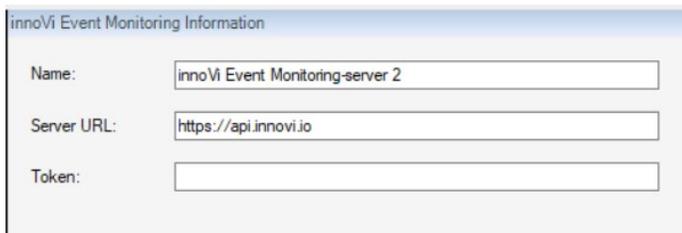
The following **innovi Event Monitoring Information** window appears:



4. Select the required integration method:

For Core integration

- Populate the following fields in the window:



- **Name:** Change as per your preference
- **Server URL:**
 - Agent Vi hosted deployment: <https://api.innovi.io>
 - Customer hosted (on premise) deployment: <https://api.innovi.app>
- **Token:** paste the innoVi token you saved as part of your service account

- Mark the events you want to receive from innoVi:
 - Analytics events
 - Health events
 - All health events
 - User defined health events

Integration Type: Receive events from Core
 Receive analytics events from Core

Receive health events from Core

Receive all health events

Receive user defined health events

Note: refer to chapter **Configuring Health Events** for a detailed description how to configure Health events, alarms and actions in Milestone client

- **XProtect event Server IP Address:** enter the relevant IP address

The remaining fields are not applicable.

Receive analytics events and metadata from Edge device

XProtect Event Server IP Address:

Events Integration Port:

Events Integration URI:

Metadata Integration Port:

Metadata Integration URI:

For Edge integration

Populate only the **Name** field in the **innovi Event Monitoring Information** window:



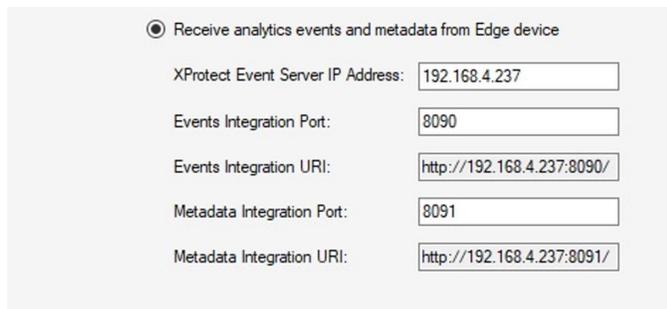
innovi Event Monitoring Information

Name:

Server URL:

Token:

- **XProtect event Server IP Address:** enter the relevant IP address



Receive analytics events and metadata from Edge device

XProtect Event Server IP Address:

Events Integration Port:

Events Integration URI:

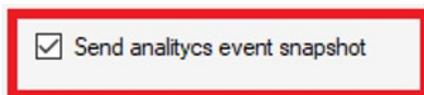
Metadata Integration Port:

Metadata Integration URI:

- **Events Integration Port:** enter the relevant Port. Once entered the value of the **Events Integration URI** field is automatically updated. If you perform this configuration on the Milestone Event Server, keep the **Events Integration URI** value to be used in the Edge integration definition in innovi (see next chapter)
- **Metadata Integration Port:** enter the relevant Port. Once entered the value of the **Metadata Integration URI** field is automatically updated. If you perform this configuration on the Milestone Event Server, keep the **Metadata Integration URI** value to be used in the Edge integration definition in innovi (see next chapter)

5. Exit the screen and select **Save** when prompted

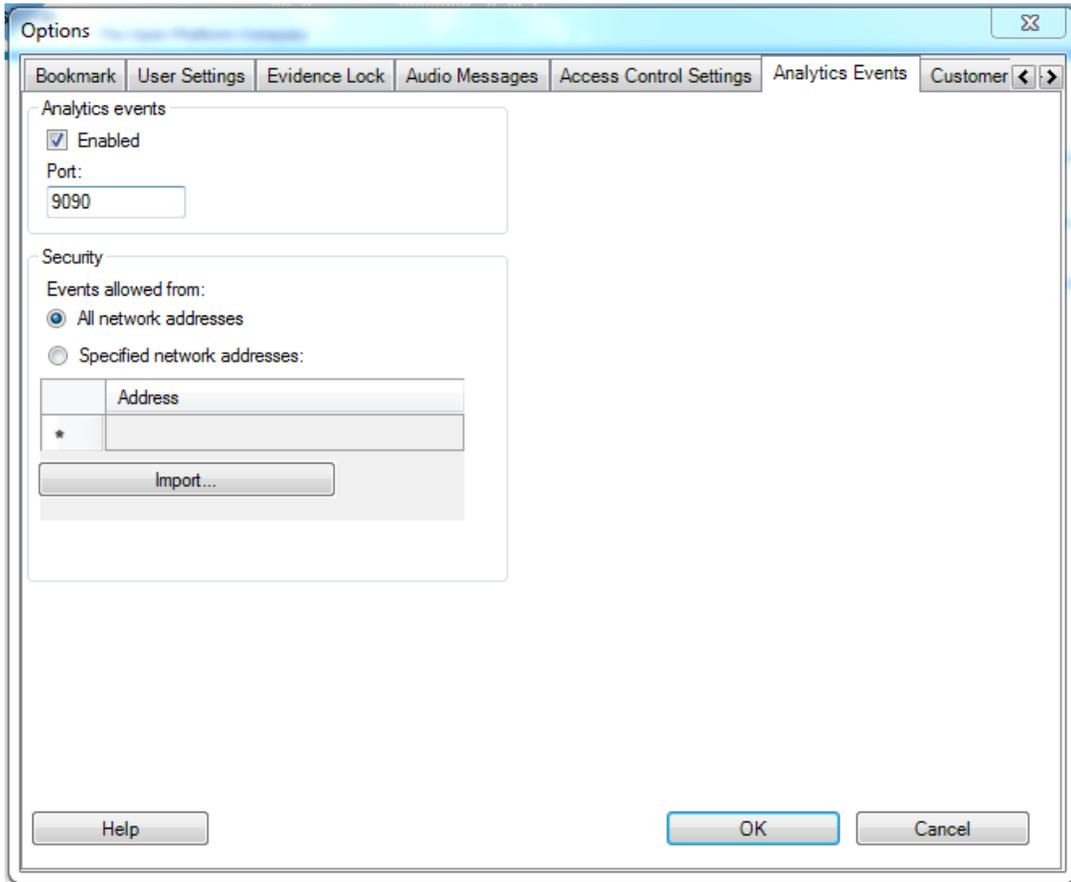
6. If you are interested in sending event snapshots to Milestone, mark this checkbox:



Send analytics event snapshot

7. Ensure that Analytics Events are enabled by doing the following:

- From the Tools tab at the top, select **Options**. The Options panel opens. Select the **Analytics Events** tab and ensure that the **Enabled** field is checked.



5. Enable Edge integration in innovi

Perform the following actions when integrating innovi to Milestone using the Edge integration option

5.1. Define Integration Targets in innovi

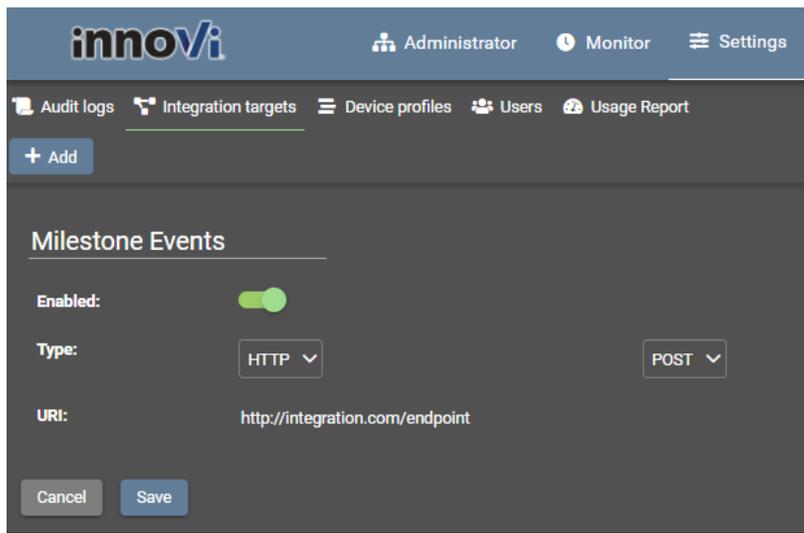
The Integration Targets in innovi are the system wide definitions required for innovi to integrate with Milestone. You will define the endpoints that can receive the events and metadata sent by innovi.

To define the Integration Targets in innovi, do the following:

1. Log in to your innovi account.
2. From the top module bar, select **Settings**.
3. Select **Integration Targets**.
4. Click the **Add** button. The Integration Target screen appears.
5. Define the following:

Events integration

- a. Target name: Define a meaningful name such as **Milestone Events**
- b. Ensure toggle switch is Enabled
- c. Type: Keep default values HTTP and POST
- d. URI: Enter the same URI you have defined in the MIP Plugin installed on the Milestone Event Server



The screenshot shows the 'Integration targets' page in the innovi interface. The top navigation bar includes 'Administrator', 'Monitor', and 'Settings'. Below the navigation bar, there are tabs for 'Audit logs', 'Integration targets', 'Device profiles', 'Users', and 'Usage Report'. A '+ Add' button is visible. The main content area is titled 'Milestone Events' and contains the following configuration options: 'Enabled' (a green toggle switch), 'Type' (two dropdown menus, one set to 'HTTP' and one to 'POST'), and 'URI' (a text input field containing 'http://integration.com/endpoint'). At the bottom, there are 'Cancel' and 'Save' buttons.

Click **Save**. The integration Target is defined and is listed in the Integration Targets list

Metadata Integration (for overlay display)

Define the following:

- a. Target name: Define a meaningful name such as Milestone Overlay

- b. Ensure toggle switch is Enabled
- c. Type: Change to WS and GET
- d. URI: Enter the same URI you have defined in the MIP Plugin installed on the Milestone Event Server

The screenshot shows the 'innovi' web interface. At the top, there is a navigation bar with 'Administrator', 'Monitor', and 'Settings' links. Below this is a secondary navigation bar with 'Audit logs', 'Integration targets', 'Device profiles', 'Users', and 'Usage Report' links. A '+ Add' button is visible. The main content area is titled 'Milestone Overlay' and contains the following configuration options:

- Enabled:** A toggle switch that is currently turned on (green).
- Type:** Two dropdown menus. The first is set to 'WS' and the second is set to 'GET'.
- URI:** A text input field containing the value 'http://integration.com/endpoint'.

At the bottom of the form are 'Cancel' and 'Save' buttons.

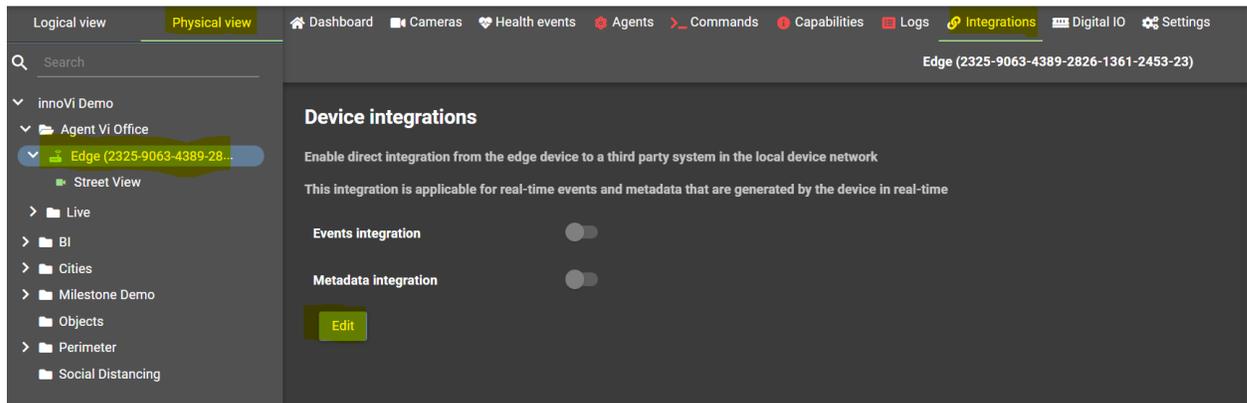
Click **Save**. The integration Target is defined and is listed in the Integration Targets list

5.2. Define Edge Integrations in innovi

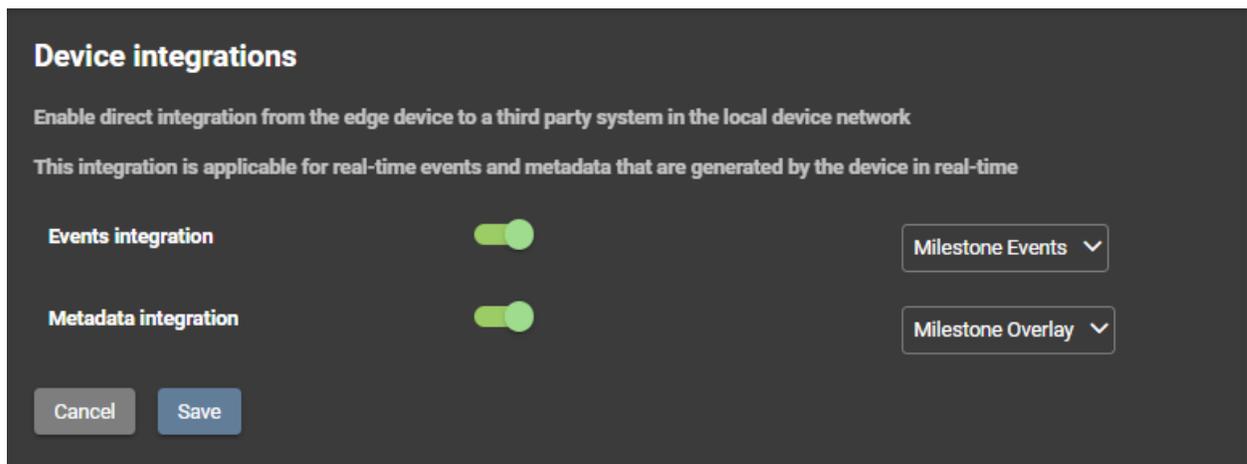
The Edge Integrations in innovi are the innovi Edge specific definitions required for innovi to integrate with Milestone. Perform the following for each innovi Edge you want to integrate with Milestone.

To define the Edge Integration in innovi, do the following:

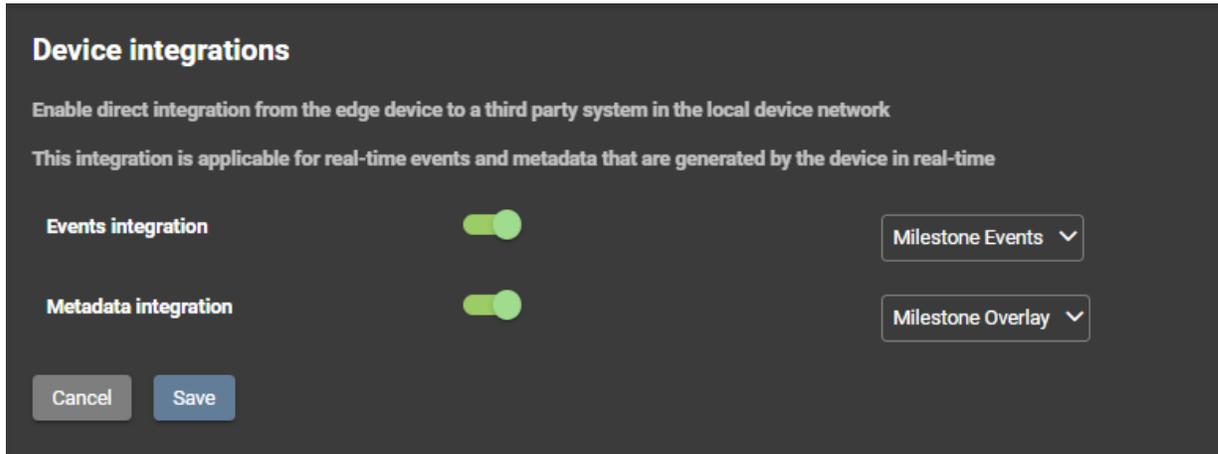
1. Log in to your innovi account



2. Select **Physical View**
3. Select the **innovi Edge** for which you want to define the integration
4. Select **Integrations**
5. Click **Edit**



6. Enable **Events Integration** and select the relevant Integration Target you have previously defined (in this example – **Milestone Events**)
7. Enable **Metadata Integration** and select the relevant Integration Target you have previously defined (in this example – **Milestone Overlay**)



8. Click **Save**

6. Synchronize Milestone Server Time to innoVi Edge Time

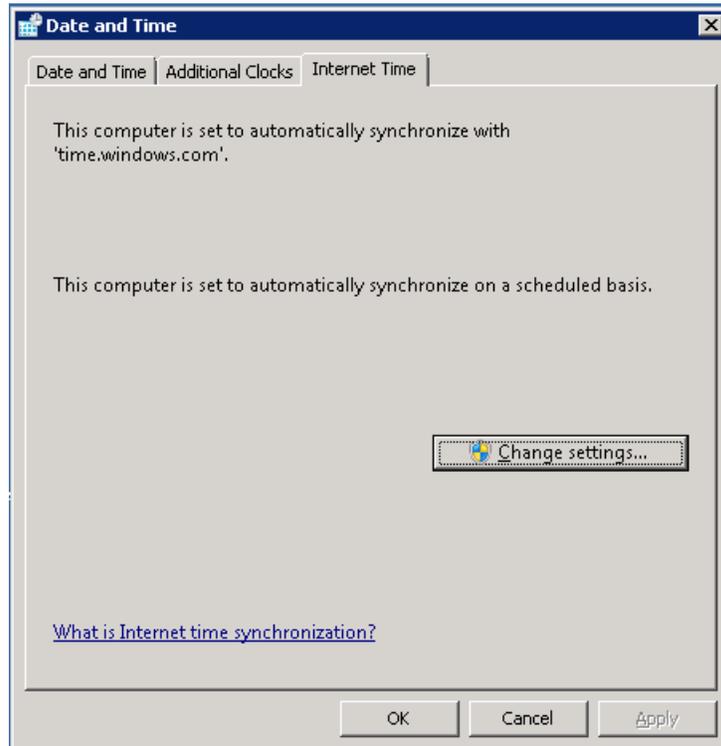
➤ **Before you start:**

As mentioned in the Time Synchronization section, innoVi supports time sync to the innoVi Edge device time. The innoVi device and the Milestone server time definitions must therefore be synchronized. Verify that the NTP (Network Time protocols) are synchronized.

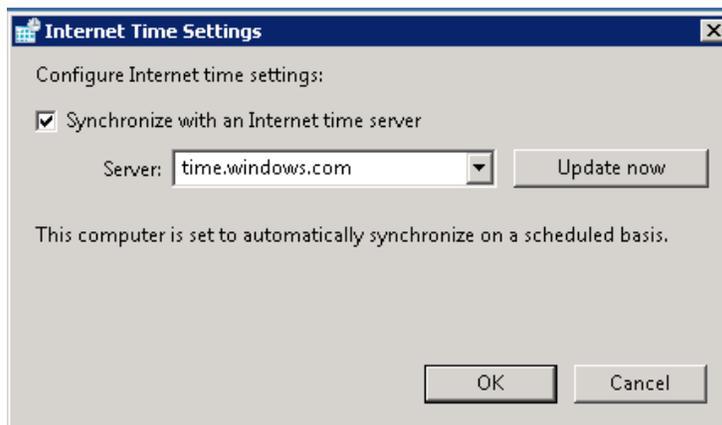
Note: If your deployment is synced to the video stream time using the Milestone Open Network Bridge solution, disregard this section.

➤ **To Verify that the Milestone Server time is synchronized to innoVi Edge device time, do the following:**

1. Open windows Date and Time panel and select **Internet Time**.
2. Click the **Change Settings** button



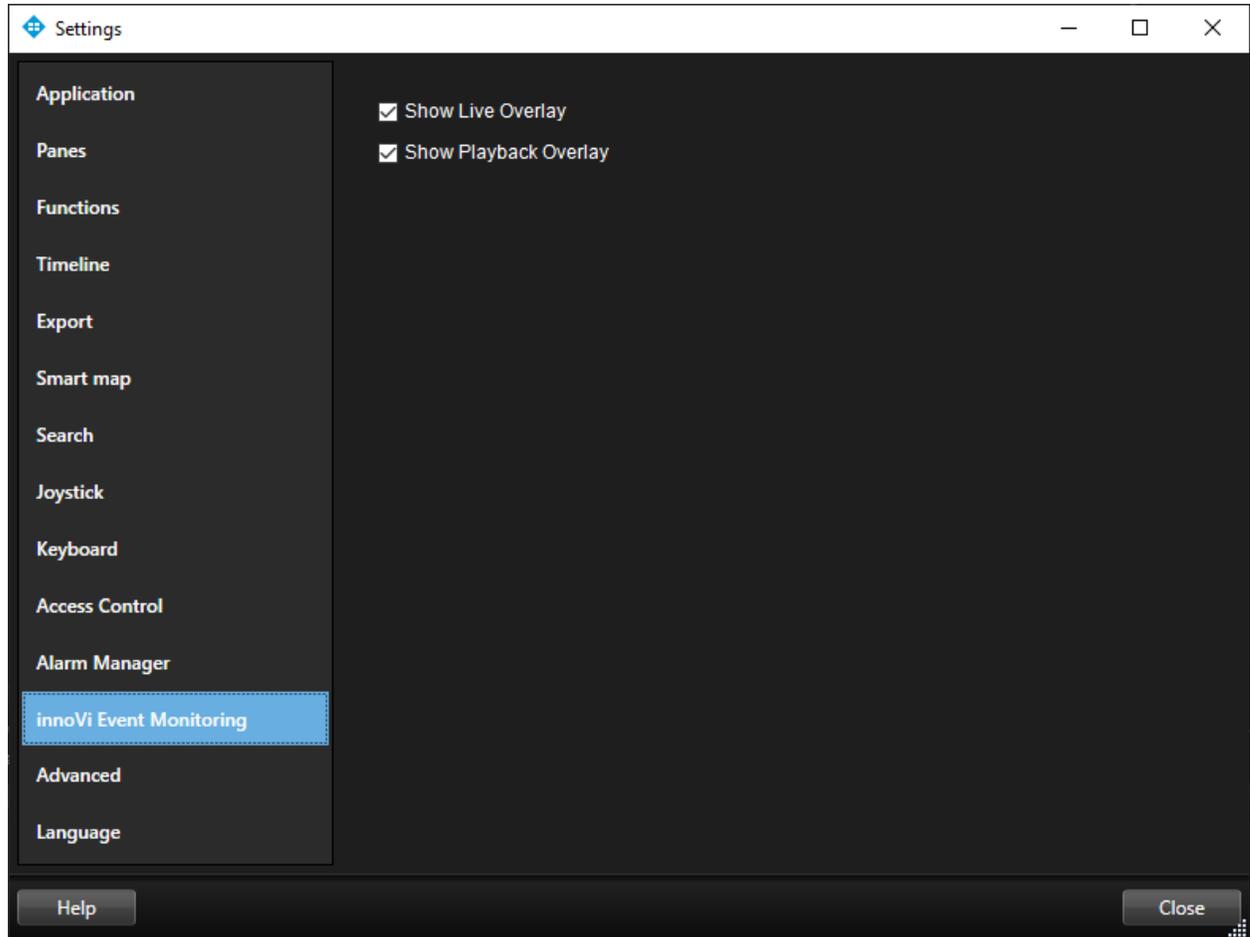
3. Ensure synchronization checkbox is enabled.



7. Enable overlays

➤ To enable overlays in Milestone Smart Client, do the following:

1. Open **Milestone Smart Client**
2. Select **Settings**
3. Select **innovi Event Monitoring**



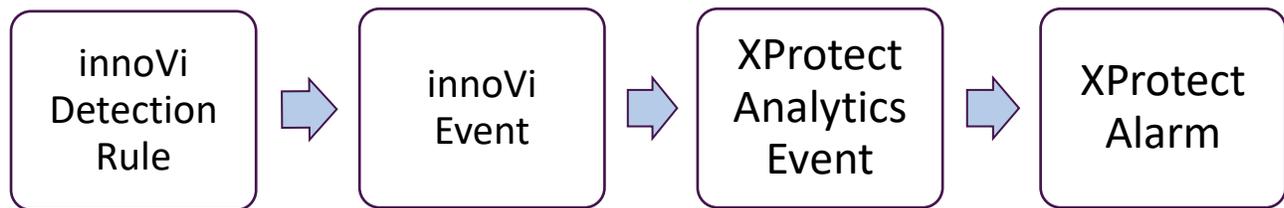
Enable the following fields as required:

- **Show Live Overlay**
- **Show Playback Overly**

8. Configure Default innovi Detection Event & Alarm in Milestone

The default configuration described in this section allows for every detection event sent from innovi to be reported as an alarm in Milestone's Smart Client.

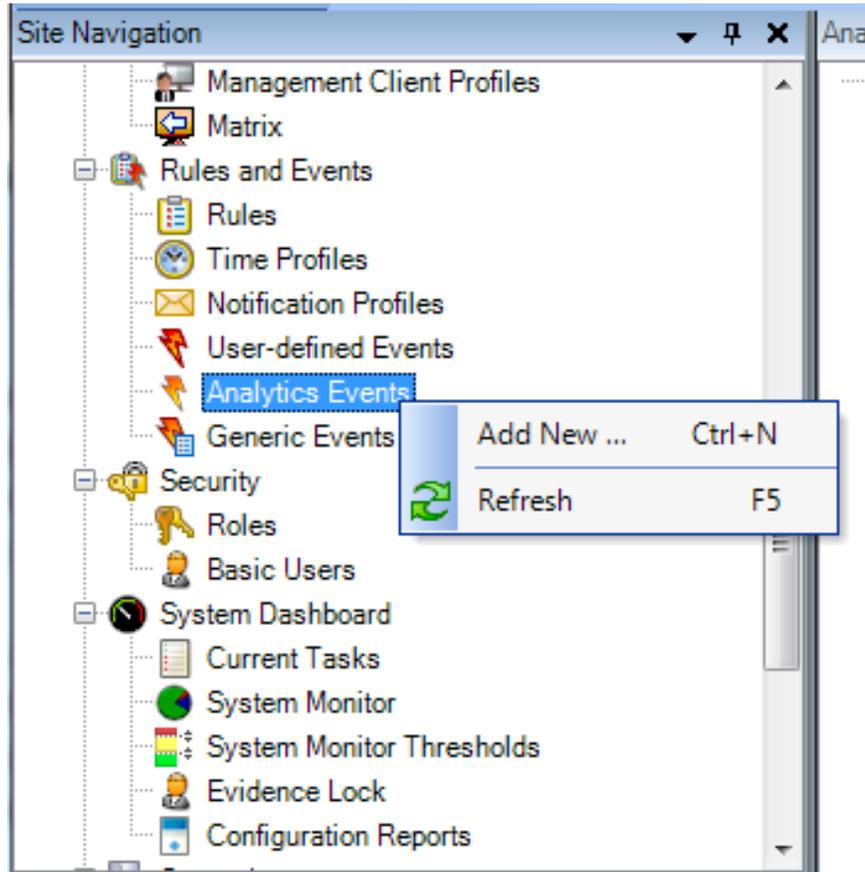
The triggering flow is:



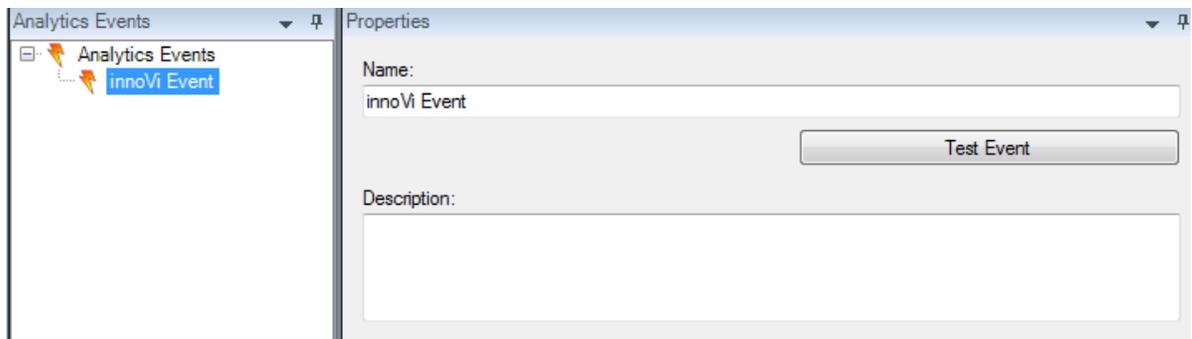
8.1. Define innovi's XProtect Analytics Event

➤ To define an innovi XProtect analytics event, do the following:

1. From the Management Client site navigation tree, navigate to **Rules and Events** (XPCO) or **Events and Output** (XPE) and select **Analytics Events**.
2. Right-click **Analytics Events** and select **Add New**



3. In the Properties section, for the **Name** field, enter **innovi Event**

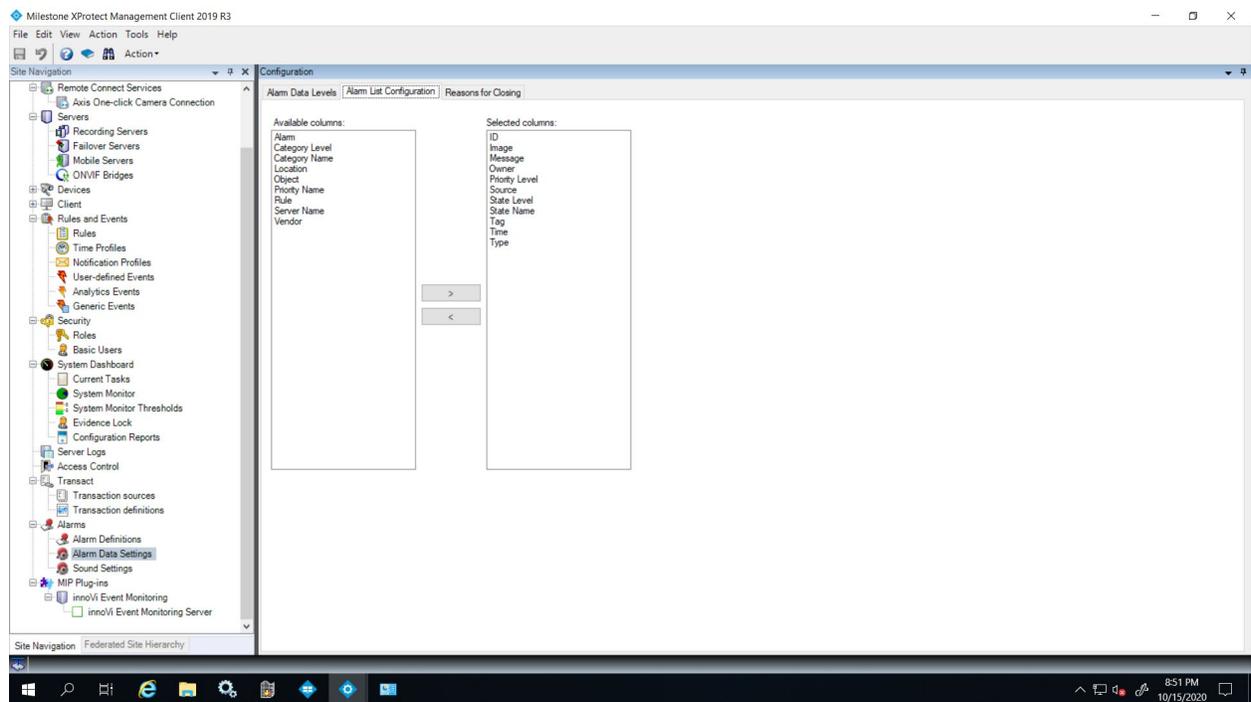


*Note: You must name the new entry exactly as specified: **innovi Event***

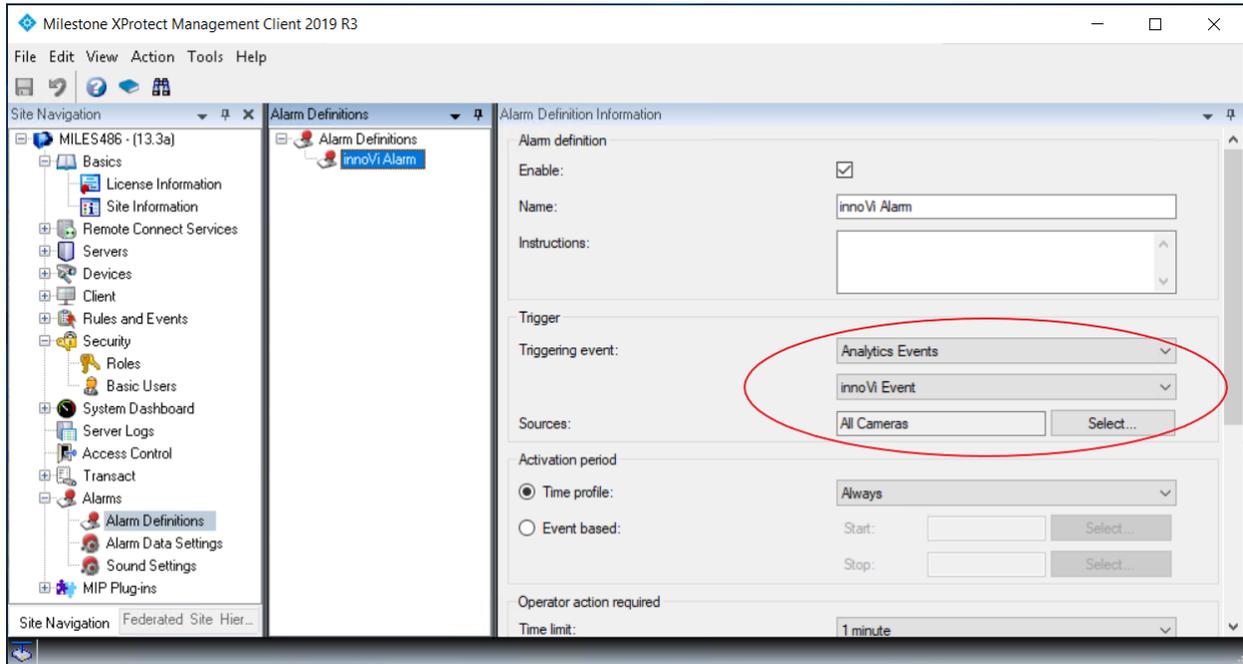
8.2. Define innovi's Alarm in Milestone XProtect

➤ To define innovi's alarm in Milestone XProtect, do the following:

1. From the Site Navigation tree, expand **Alarms** and select **Alarm Data Settings**.
2. Select the Alarm list Configuration tab.
3. Ensure the following are included in the selected columns:
 - **Time**
 - **Source**
 - **Tag**
 - **Message**



4. From the Site Navigation tree, expand **Alarms** and select **Alarm Definitions**
5. Right-click **Alarm Definitions** and click **Add New...**



6. In the Alarm Definition Information, enter the following:

- **Name:** InnoVi Alarm
- **Triggering event:** choose **Analytics Events** in the upper list and **InnoVi Event** in the lower list as shown

Sources: click **Select**; in the Select Sources screen that opens, open the **Servers** tab, choose **All cameras** and **Add** it to the Selected list

7. Exit the screen and select **Save** when prompted.

8.3. Restart Milestone XProtect Event Server service

➤ **Before you start:**

In order for the configuration to take effect you must restart the Milestone XProtect Event Server service on the relevant PCs.

➤ **To restart the Milestone XProtect service, do the following:**

1. Open the windows **Services** panel and restart the **Milestone XProtect Event Server Service**.

9. Configure and View Alarms in Milestone Smart Client

➤ **Before you start:**

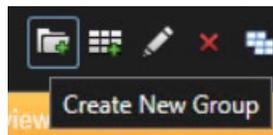
The following steps explain how to view the innoVi alarms in Milestone Smart client application

➤ **To configure and view innoVi Alarms in Milestone smart client, do the following:**

1. Open the **Milestone Smart Client** application
2. Define a view, as follows:
 - Select the **Live** tab on the left-hand side of the application window
 - Click the **Setup** button on the right-hand side of the application window:



Define a new group using the New group icon



Right-click the newly created group name and define a new view, for example, (1 + 2*); make sure to select a view broad enough to contain the alarms list.

From **System Overview**, drag the **Alarm List** item to the broad part of your newly created view

*Note that you can change the order of the **Alarm List** columns. It is recommended to move the **Tag** column to the right so that its value becomes visible, since it contains an event description*

In **System Overview**, expand the cameras list and drag the relevant cameras to the remaining views.

3. When switching to the **Live View** tab:
 - All generated events appear in the list.
4. When switching to the **Playback** tab:
 - The camera view switches to the relevant event time when you click an event
 - The event plays back when you click the Play button in the Time Navigation window on the left.
5. When switching to the **Alarm Manager** tab:
 - The camera view switches to the relevant event time when you click an event, and the event is played back.

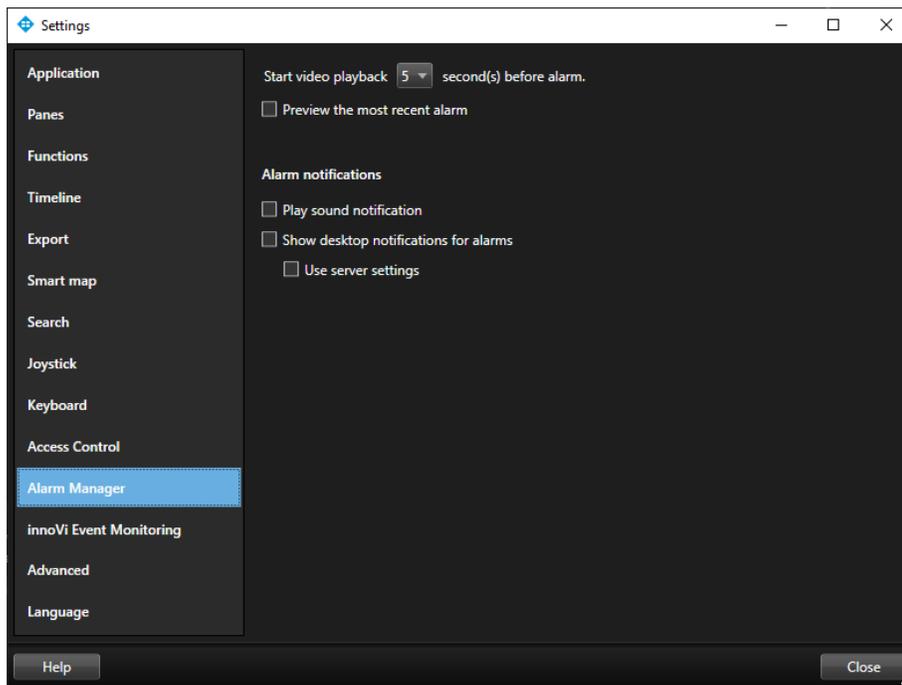
- In the Alarms list, note the **Tag** column containing the analytics event description (e.g., ‘Vehicle moving in an area’). If the **Tag** column is unavailable, right-click the table header bar to add it. If you are still unable to add it in conjunction to XPCO, refer to **Alarm Data Settings** in XProtect Management Client described [above](#).

Time	State	State Name	Message	Source	Tag	ID
10:59:56 AM 9/12/2017	1	New	innovi Event	AXIS Q1615 Fixed Network Camera	Person moving in an area	42053
10:59:15 AM 9/12/2017	1	New	innovi Event	AXIS Q1615 Fixed Network Camera	Vehicle moving in an area	42052
10:58:43 AM 9/12/2017	1	New	innovi Event	AXIS Q1615 Fixed Network Camera	Vehicle moving in an area	42051
10:58:12 AM 9/12/2017	1	New	innovi Event	AXIS Q1615 Fixed Network Camera	Vehicle moving in an area	42050
10:57:39 AM 9/12/2017	1	New	innovi Event	AXIS Q1615 Fixed Network Camera	Vehicle moving in an area	42049
10:57:04 AM 9/12/2017	1	New	innovi Event	AXIS Q1615 Fixed Network Camera	Vehicle moving in an area	42048
10:56:30 AM 9/12/2017	1	New	innovi Event	AXIS Q1615 Fixed Network Camera	Person moving in an area	42047
10:55:59 AM 9/12/2017	1	New	innovi Event	AXIS Q1615 Fixed Network Camera	Vehicle moving in an area	42046
10:55:25 AM 9/12/2017	1	New	innovi Event	AXIS Q1615 Fixed Network Camera	Vehicle moving in an area	42045
10:54:48 AM 9/12/2017	1	New	innovi Event	AXIS Q1615 Fixed Network Camera	Vehicle moving in an area	42044

9.1. Event overlay setup

To properly sync the overlay and alarm times, do the following:

- Open the **Milestone Smart Client**
- Select **Settings**
- Select **Alarm Manager**



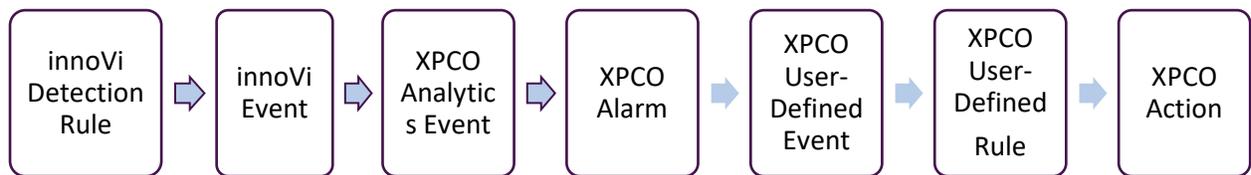
Set the value of the **Start video playback** to 5 seconds before alarm.

10. Triggering Specific Actions with XPCO

➤ **Before you start:**

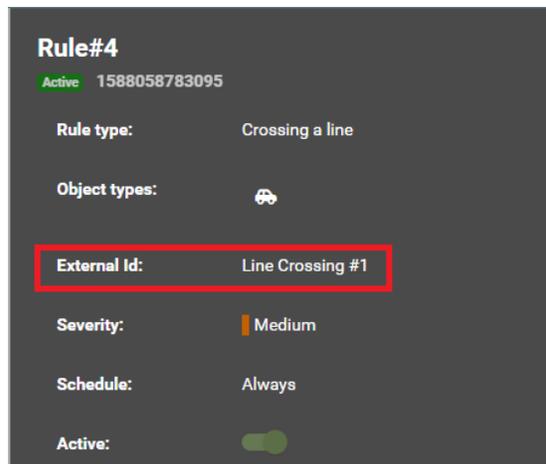
This section explains how to handle more advanced scenarios for triggering an action when an event occurs. The capability is available in Milestone XProtect Corporate Edition and is achieved by linking the analytics event to XProtect user-defined event and user- defined rule.

The triggering flow is:

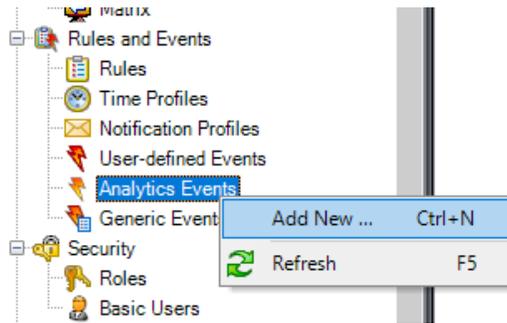


➤ **To configure innoVi and Milestone XPCO for triggering actions, do the following:**

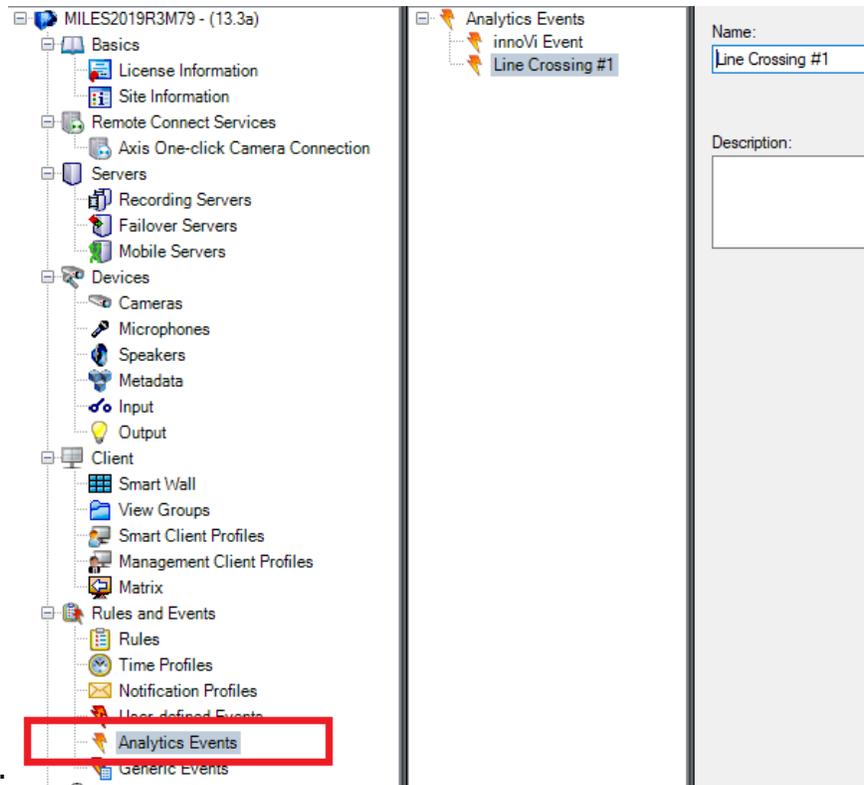
1. In the innoVi portal, select the relevant camera and then select the relevant detection rule.
2. Define an **External Id** for the rule; it will be used in the Milestone XProtect configuration.



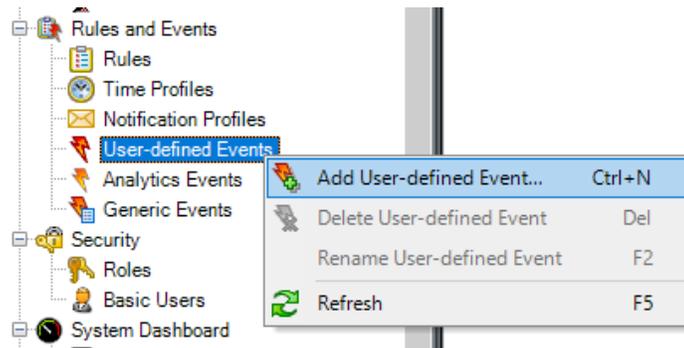
3. In Milestone XProtect Management Client navigation tree, Select **Analytics Events**, right click and select **Add New...**



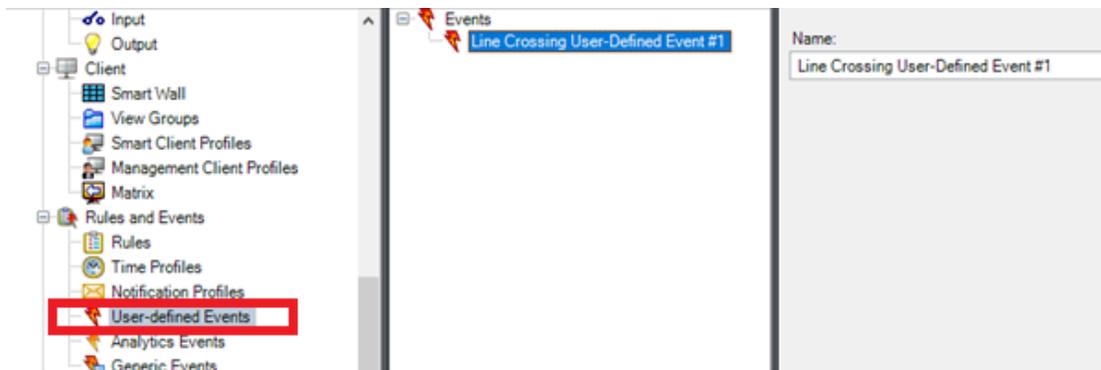
4. Enter the name identical to the **External Id** defined in innovi. In this example: **Line Crossing #1**.



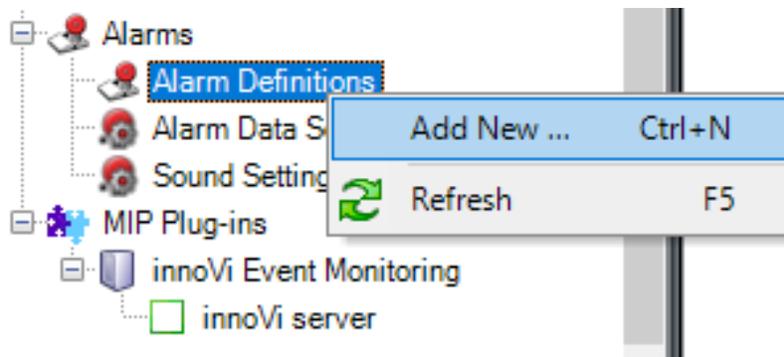
5. In Milestone XProtect Management Client Navigation tree, select **User-defined Events**, right click and select **Add User-defined Event...**



6. Enter a name for new User-Defined Event and save.



7. Add a new alarm that links between the Analytics Event and the User-defined Event. In Milestone XProtect Management Client navigation tree, select **Alarm Definitions**, right click and select **Add New...**



8. In the Alarm Definition Information, enter the following:

- **Name:** meaningful name such as innoVi Alarm- Live Crossing
- **Triggering event:** select the **Analytics Events** defined in the previous steps (Line Crossing #1)
Sources: click Select; in the Select Sources screen that opens, open the Servers tab, choose All cameras and Add it to the Selected list

Events triggered by alarm: Select the user-defined event defined in the previous steps (Line Crossing User-Defined Event #1)

The screenshot shows the 'Alarm Definition Information' dialog box with the following configuration:

- Alarm definition:**
 - Enable:
 - Name: Agent Vi Alarm - Line Crossing
 - Description: (empty)
- Trigger:**
 - Triggering event: Analytics Events
 - Line Crossing #1
 - Sources: All Cameras
- Activation period:**
 - Time profile: Always
 - Event based: (disabled)
- Operator action required:**
 - Time limit: 1 minute
 - Events triggered: (empty)
- Other:**
 - Related cameras: (empty)
 - Related map: (empty)
 - Initial alarm owner: (empty)
 - Initial alarm priority: High
 - Initial alarm category: (empty)
 - Events triggered by alarm: Line Crossing User-Defined Event #1
 - Auto-close alarm:

9. Finish the alarm definition and exit the screen and select **Save** when prompted.
10. After completing the steps above, restart the Milestone XProtect Event Server service for the configuration to take effect.

11. Configuring Health events

This section explains how to configure Health events in Milestone.

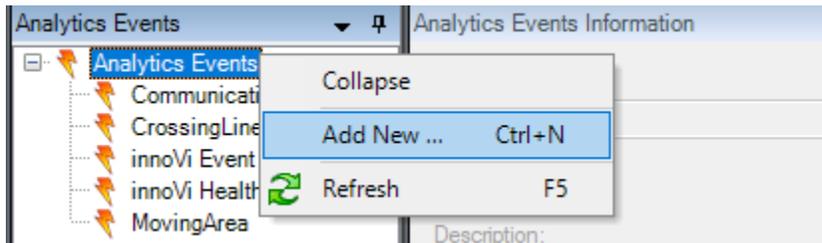
There are two options to receive Health events in Milestone:

11.1. Receive all health events

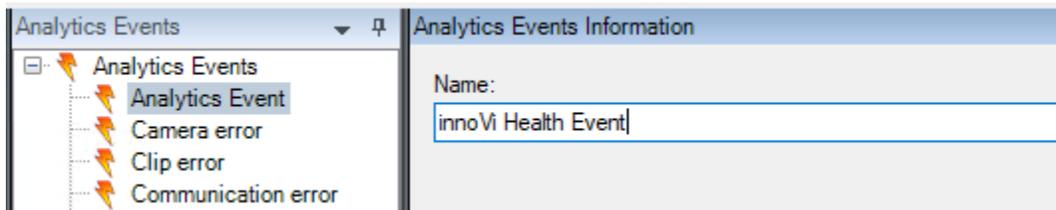
This option enables receiving all innovi health events into a single (generic) health event type in Milestone.

Perform the following actions:

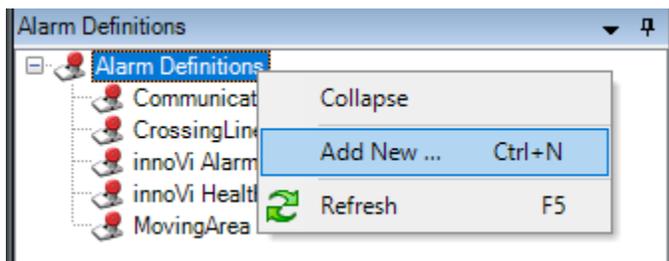
Add a new **Analytics Event** in the Milestone XProtect Management Client.

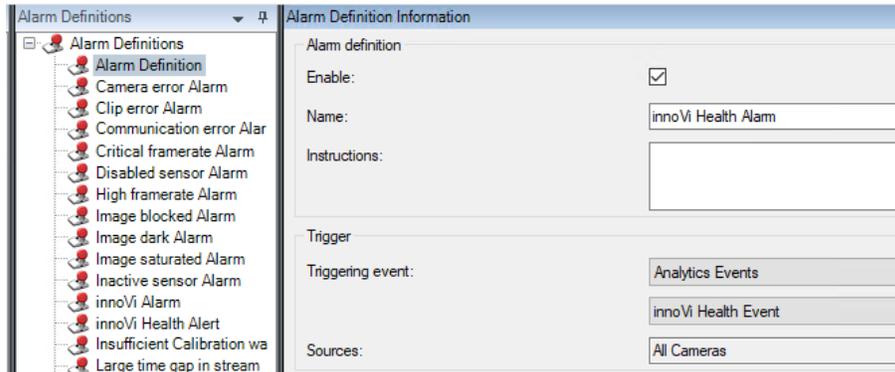


Set the name to **innovi Health Event**.



Add a new **Alarm**, which will be triggered by the innovi Health Event.





In the Alarm definition Information, enter the following:

- **Name:** innovi Health Alarm
- **Triggering event:** choose **Analytics Events** in the upper list and **innovi Health Event** in the lower list as shown
- **Sources:** click **Select**; in the Select Sources window that opens, open the **Servers** tab, choose **All cameras** and **Add** it to the Selected list
- Exit the screen and select **Save** when prompted

11.2. Receive user defined health events

This option enables receiving specific innovi health events according per user preference. One or more of the following events can be set in Milestone Management Client and associated alarms will be displayed in Milestone Smart Client.

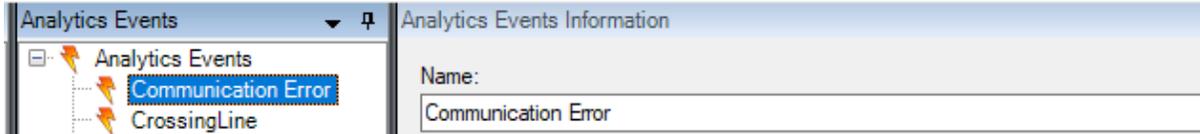
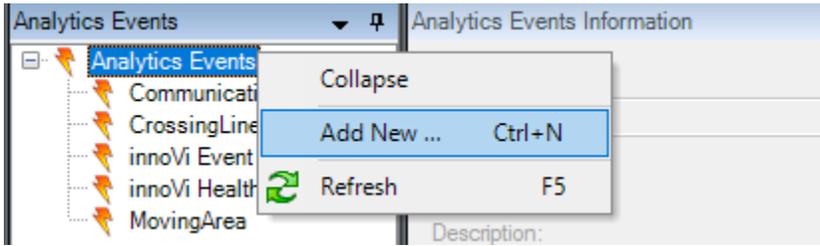
1. Communication error
2. Camera error
3. Source error
4. Unsupported URI
5. Unsupported video codec
 - a. Description - Unsupported video codec, change the source stream configuration
6. Unsupported video resolution
 - a. Description - Unsupported video resolution, change the source stream configuration
7. Large time gap in stream
 - a. Description - Large time gap in stream, check the source stream
8. Critical framerate
9. High framerate
10. Low framerate
11. Image blocked
12. Image dark
13. Image saturated
14. Suspended sensor

- a. Description - Suspended (banned) sensor - when it is detached from appliance, the sensor configuration and rules still exist, sensor connected is not connected to any appliance
- 15. Disabled sensor
 - a. Description - Sensor is disabled by user (or by Arm/Disarm command)
- 16. Inactive sensor
 - a. Description - Sensor is not active due to user action (enable/disable, attach/detach)
- 17. Sensor active error
 - a. Description - Sensor is enabled by user, active and in error state
- 18. Sensor active warning
 - a. Description - Sensor is enabled by user, active and in warning state
- 19. ONVIF error
 - a. Description - ONVIF error, contact Agent Vi customer support
- 20. ONVIF not reachable
 - a. Description - ONVIF host not reachable, check the address and user\password
- 21. RTSP authentication error
 - a. Description - RTSP authentication error, check the user and password
- 22. RTSP not reachable
 - a. Description - RTSP host not reachable, check the host and port address, try toggling the multicast support setting
- 23. RTSP stream issue
 - a. Description - RTSP stream issue, try opening with VLC player
- 24. RTSP timeout
 - a. Description - RTSP timeout, try toggling the multicast support setting
- 25. Clip error
 - a. Description - Failed to download clip, check the path
- 26. Insufficient Calibration
 - a. Description - Insufficient auto-calibration

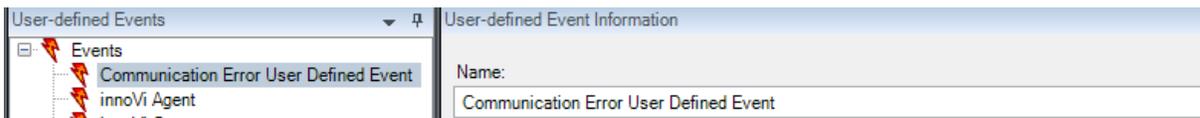
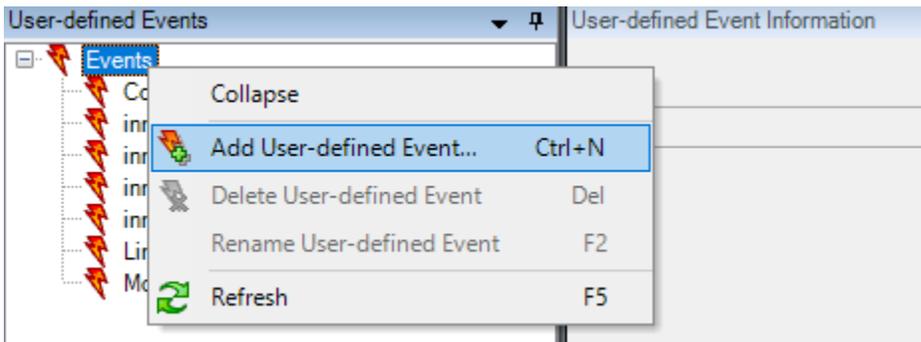
The description of the health event will be displayed in the Tag field of the Alarm List in the Milestone XProtect Smart Client. It will be one of the supported user Defined events listed above.

The example below shows adding a user-defined Health event:

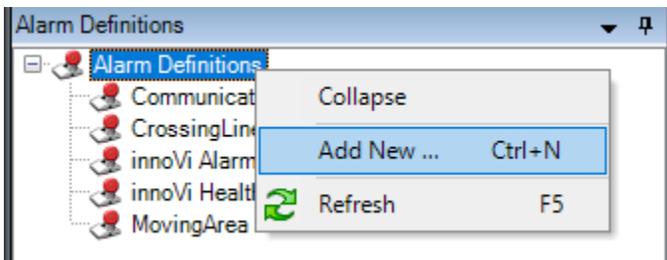
Add a new **Analytics Event** in the Milestone XProtect Management Client. The name must be set to one of the events listed above.



Add a new **User-defined Event** in the Milestone XProtect Management Client:



Add a new **Alarm**, linking the Analytics Event and the User-defined Event.



The screenshot shows the 'Alarm Definitions' interface. On the left is a tree view of alarm types, with 'Communication error Alarm' selected. On the right is the 'Alarm Definition Information' form, which is configured as follows:

- Alarm definition:**
 - Enable:
 - Name: Communication error Alarm
 - Instructions: (empty text area)
- Trigger:**
 - Triggering event: Analytics Events (selected from a list)
 - Communication error (selected from a list)
 - Sources: All Cameras (selected from a list)
- Activation period:**
 - Time profile: Always
 - Event based: (Start and Stop fields are empty)
- Map:**
 - Alarm manager view: Smart map, Map
 - Related map: (empty text area)
- Operator action required:**
 - Time limit: 1 minute
 - Events triggered: (empty text area)
- Other:**
 - Related cameras: (empty text area)
 - Initial alarm owner: (empty text area)
 - Initial alarm priority: 1: High
 - Alarm category: (empty text area)
 - Events triggered by alarm: Communication error (user defined)
 - Auto-close alarm:
 - Alarm assignable to Administrators:

In the Alarm definition Information, enter the following (for this specific example):

- **Name:** Communication error Alarm
- **Triggering event:** choose **Analytics Events** in the upper list and **Communication error** in the lower list as shown
- **Sources:** click **Select**; in the Select Sources window that opens, open the **Servers** tab, choose **All cameras** and **Add** it to the Selected list
- **Events triggered by alarm:** select the user-defined event added above - *Communication error (user defined)*
- Exit the screen and select **Save** when prompted

For both options:

New health events are displayed in the Alarms list with **New** State Name:

Quick Filters	Alarms	Time	Priority Le	State Level	Tag	State Name	Message	Source
<ul style="list-style-type: none"> New (53185) In progress (0) 	New (filter applied)	1:43:09 PM 1/30/2022	1	1	Communication error, started:1/30/2022 1:38:00 PM	New	Communication Error	AXIS Q7406 Video Encoder Blade (192.168.90.41) - Camera 1

Closed health events are displayed in the Alarms list with **Closed** State Name:

Quick Filters	Alarms	Time	Priority Le	State Level	Tag	State Name	Message	Source
<ul style="list-style-type: none"> New (53176) In progress (0) On hold (0) Closed (1) 	Closed (filter applied)	2:09:11 PM 1/30/2022	1	11	Communication error, started:1/30/2022 2:04:05 PM	Closed	Communication Error	AXIS Q7406 Video Encoder Blade (192.168.90.41) - Camera 1

Double click on a health event to view additional details for the event:

Camera: **AXIS Q7406 Video Encoder Blade (192.168.90.4)** Go to Alarm Time

Instructions

Assigned to:

State: 11: Closed

Priority: 1: High

Category:

ID: 1862037

Source: AXIS Q7406 Video Encoder Bla...

Alarm: Communication Error Alarm

Message: Communication Error

Type: 554792ba-d950-4295-9869-e69...

Rule: Alarm Definition

Location:

Tag: Communication error, started:1/...

Vendor:

Object:

Activities

Time	Activity	Owner
2:09 PM	Initial priority: 1: High	
2:13 PM	innoVi Error, message:Communication error, started:1/30/2022 2:04:05 PM, closed:1/30/2022 2:13:37 PM, duration: 10m.	qa2008 (agent\qa2008)
2:13 PM	State changed to: 11: Closed	qa2008 (agent\qa2008)
2:13 PM	Priority changed to: 1: High	qa2008 (agent\qa2008)

Add

Help Print... OK

12. Display Event Snapshot in Milestone Smart Client

If the Send event analytics snapshot is checked, innoVi sends event snapshots to Milestone.

- Core integration
Receive event snapshot with overlay from innoVi and send to Milestone Event Server
- Edge integration
Receive event image and metadata from the innoVi Edge and after drawing the overlay on the received image, send the snapshot to Milestone Event Server

The snapshot is displayed in the right-hand side of the event playback:



You can use the Default for camera title bar setting in the Milestone XProtect Smart Client to Show or Hide the camera's title:

Option	Setting	Follow server
Application maximization	Maximize to full screen	<input checked="" type="checkbox"/>
Camera error messages	Black image with overlay	<input checked="" type="checkbox"/>
Server error messages	Hide	<input checked="" type="checkbox"/>
Default for camera title bar	Show	<input type="checkbox"/>
Show current time in title bar	Show	<input checked="" type="checkbox"/>
Show in empty view positions	Milestone logo	<input checked="" type="checkbox"/>
View grid spacer	1 pixel	<input checked="" type="checkbox"/>
Default image quality	Full	<input checked="" type="checkbox"/>
Default frame rate	Unrestricted	<input checked="" type="checkbox"/>
Default video buffer	Standard	<input checked="" type="checkbox"/>
Default PTZ click mode	Virtual joystick	<input checked="" type="checkbox"/>
Start mode	Last	<input checked="" type="checkbox"/>
Start view	Last	<input checked="" type="checkbox"/>
Hide mouse pointer	after 5 seconds	<input checked="" type="checkbox"/>
Snapshot	Available	<input checked="" type="checkbox"/>
Path to snapshots	c:\Snapshots	<input checked="" type="checkbox"/>
Help	Available	<input checked="" type="checkbox"/>

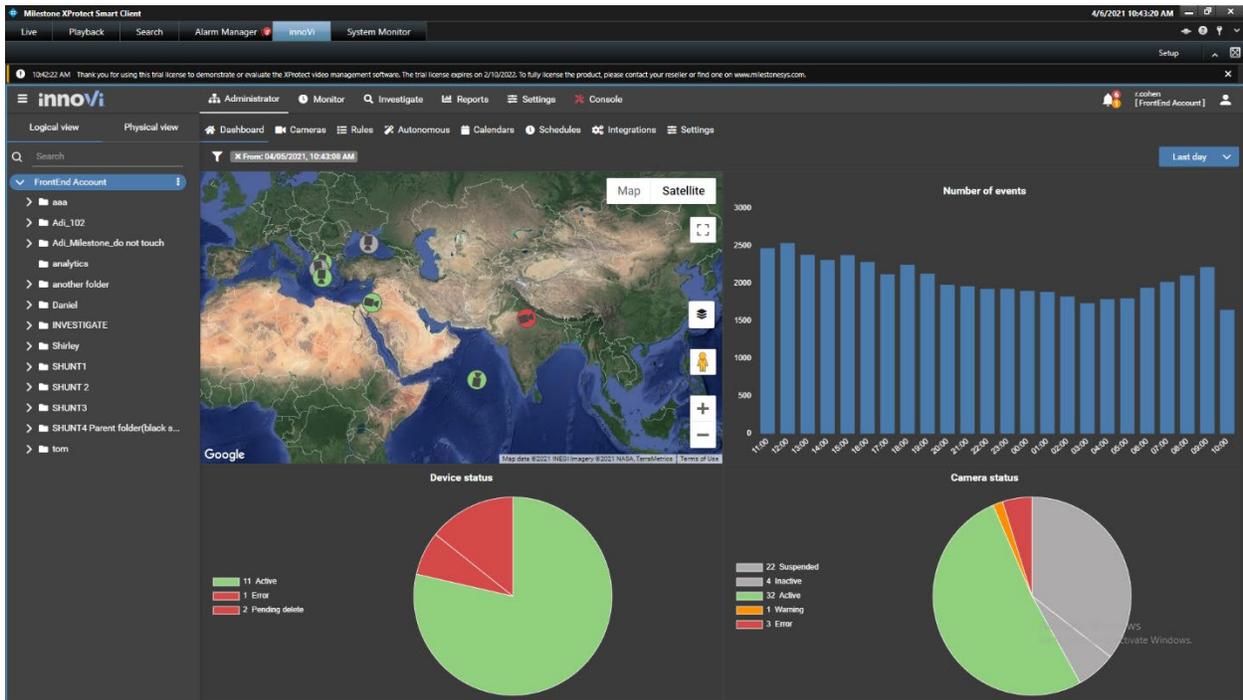


For Grouping and Occupancy rule types, the overlay for the snapshot and playback is drawn using the “common” overlay which contains all relevant individual event objects. See following example:



13. Display innovi in Milestone Smart Client

Once the innovi Event Monitoring MIP Plugin is installed, an innovi tab is available in the smart client. Once selected, a login window is displayed. Log in to innovi using your credentials.



14. Troubleshoot innovi Event Monitoring MIP Plugin Integration

Problem	Corrective Action
<p>Milestone XProtect Management Client</p> <p>innovi is not displayed under the MIP plugins node in Milestone XProtect Management Client</p>	<p>Verify that the innovi Event Monitoring MIP plugin is installed</p>
<p>Milestone XProtect Management Client</p>	<p>Verify that the Milestone Event Server service is running</p>

Problem	Corrective Action
<p>Alarm definitions is not displayed under the Alarm node in Milestone XProtect Management Client</p>	
<p>Smart Client: There are no analytics alarms in Smart Client</p>	<ul style="list-style-type: none"> • Verify the innoVi parameters in XProtect Management Client are correctly defined • Verify that the camera's External ID in innoVi is correctly defined • Restart the Milestone Event Server if it was not restarted after defining Server properties • Verify the innoVi Event is defined and has an associated alarm. Note it is case sensitive. It must be correctly connected to the alarm definition
<p>Smart Client: There is no metadata (or only partial metadata appears) when playing back recorded video in Smart Client</p>	<p>Click the Play button again in case it was not clicked the first time</p>
<p>Smart Client: There are no alarms in Alarm List, the header is red, and it displays a message regarding user privileges in Smart Client</p>	<ul style="list-style-type: none"> • Verify the user connected to the Smart Client has sufficient user privileges, as follows: In XProtect Management Client, check the properties of the user under Advanced Configuration > Users

Problem	Corrective Action
<p>Smart Client: All the above actions did not help; you are still unable to view analytics events in Milestone. Follow the instructions under the Corrective Action column to the right, to obtain Milestone MIP log files.</p>	<ul style="list-style-type: none"> • Enable viewing hidden files and folders on Milestone’s machine • Open Milestone XProtect Smart Client installation directory. By default, it is installed at <i>C:\ProgramFiles\Milestone\XProtect Smart Client</i> or at <i>C:\ProgramFiles (x86)\Milestone\XProtect Smart Client</i> for 32-bit Smart Client versions • Open the client.exe.config file • Uncomment the commented elements in <Logger name="MIPLogger"> (Delete " <!-- " and " --> " at the beginning and the end of the line) • Reproduce the issue Copy the <i>C:\ProgramFiles\Milestone\XProtect Smart Client</i> directory into a zip archive and send it to your support team
<p>Smart Client: There is no possibility of adding a Tag column to the Alarm List</p>	<ul style="list-style-type: none"> • Open the XProtect Management Client • Choose the Alarm Data Settings on the right • Choose the Alarm List Configuration tab • Add Tag to the Selected Columns list • Save the new setting

Problem	Corrective Action
<p>Smart Client: An error occurs when opening the Smart Client on Windows Server 2008</p>	<ul style="list-style-type: none"> • May occur because the Enhanced Security Configuration for the current user is turned on • To turn it off, open the Security Information in the Server Manager and set the Enhanced Security Configuration to be Off for the relevant user type
<p>The recorded video is not synchronized with object metadata overlays</p>	<ul style="list-style-type: none"> • Set up same NTP endpoint on Edge Device, cameras and Milestone XProtect

15. Contact Agent Vi Support

- From the innoVi Portal Support hub menu  , select **Submit a Support Request**
- Use the innoVi support form on Agent Vi’s website: <https://support.agentvi.com/support/innovi-request/>
- Email support.innovi@iricity.com