



*Comprehensive Video Analytics Solutions*

# Integration Guide: innoVi – XProtect



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# 1 Overview

Integration of Milestone's XProtect with Agent Vi's innoVi offers a video analytics solution / service whereby events of interest are detected through real-time analysis of multiple video sources and sent to Milestone XProtect Smart Client

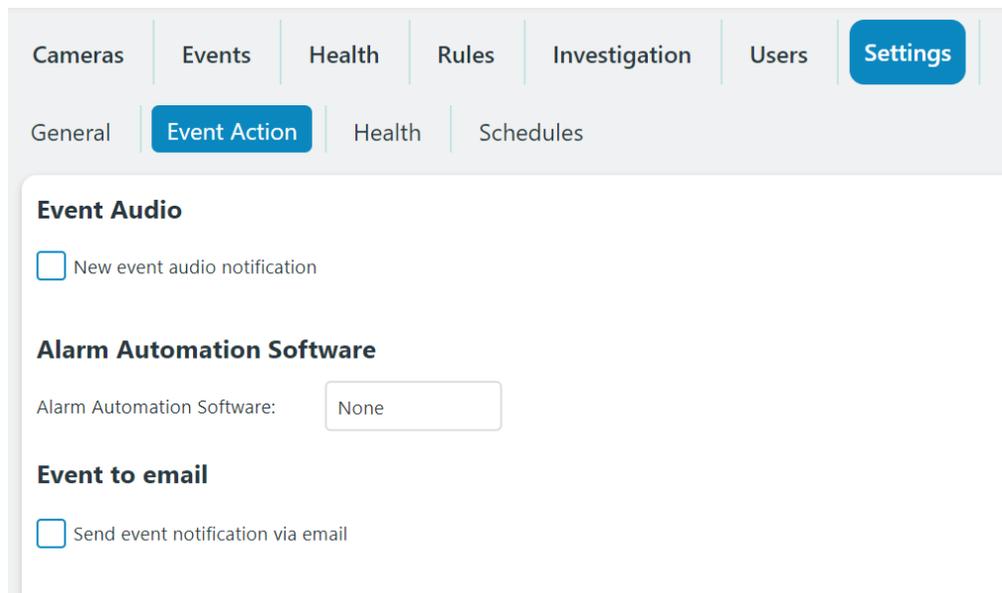
## 1.1. About this Guide

This guide outlines how to deploy and configure the integration of Agent Vi innoVi and Milestone XProtect

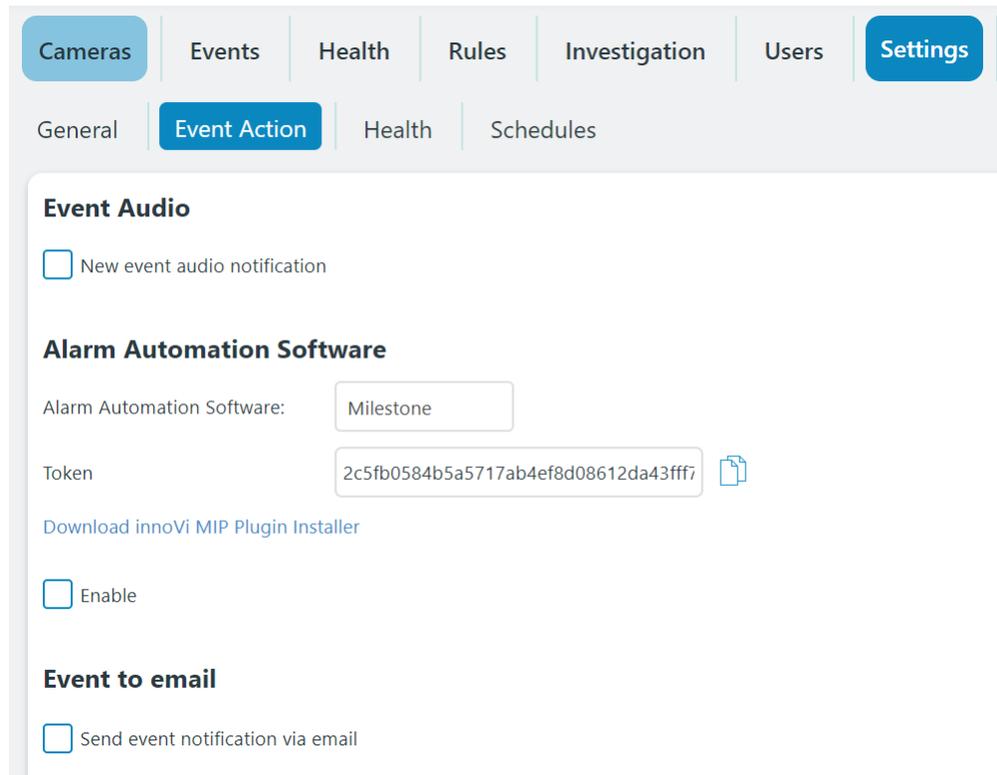
## 1.2. Enabling Procedure

To enable innoVi with XProtect:

1. Go to innoVi account, Settings tab
2. Click the event Action tab
3. The following window is displayed:



4. Set Alarm Automation Software to Milestone. The following window is displayed:



The screenshot shows a web interface with a top navigation bar containing tabs: Cameras, Events, Health, Rules, Investigation, Users, and Settings (which is highlighted in blue). Below this is a sub-navigation bar with tabs: General, Event Action (highlighted in blue), Health, and Schedules. The main content area is titled 'Event Audio' and contains a checkbox for 'New event audio notification'. Below that is the 'Alarm Automation Software' section, which includes a text input field for 'Alarm Automation Software' containing the word 'Milestone', a text input field for 'Token' containing a long alphanumeric string '2c5fb0584b5a5717ab4ef8d08612da43fff7' with a copy icon to its right, and a link 'Download innoVi MIP Plugin Installer'. At the bottom of this section is an 'Enable' checkbox. The 'Event to email' section contains a checkbox for 'Send event notification via email'.

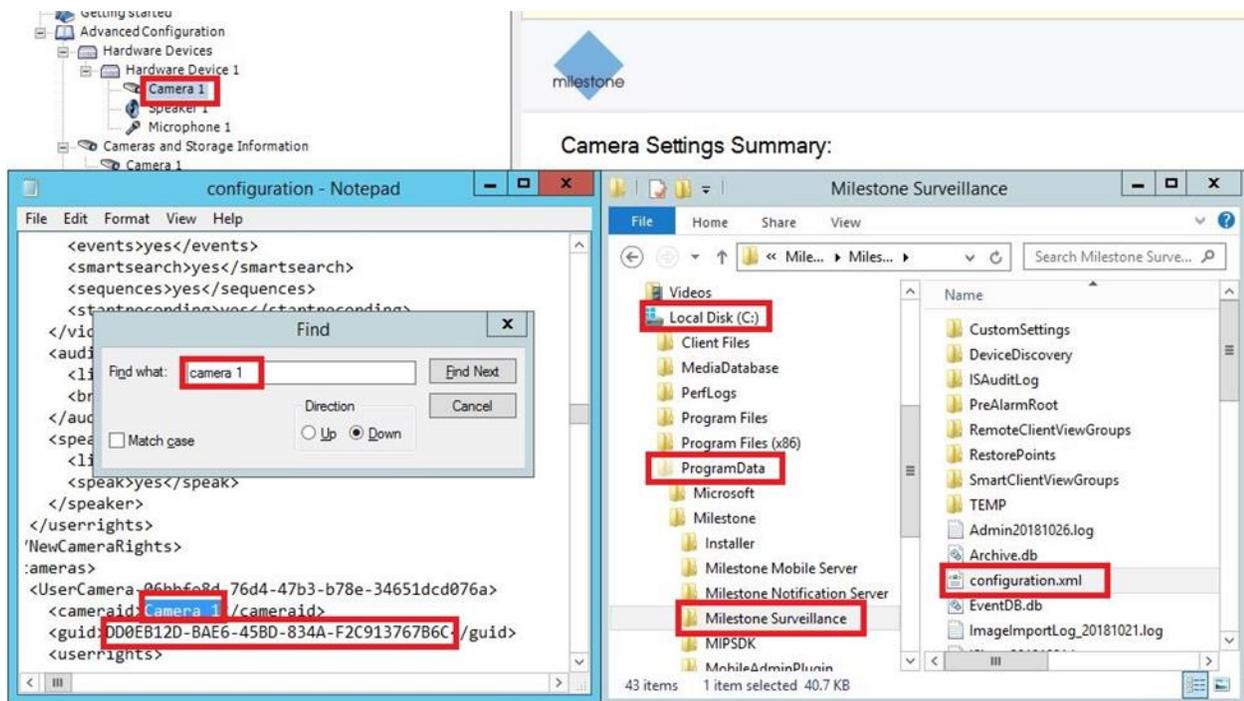
5. Note a unique token is displayed
6. Click the link “Download innoVi MIP Plugin Installer” and download the installer file to your desktop
7. Make sure the ‘Enable’ check box is checked
8. Click the Apply button
9. A green colored message is displayed: “Milestone Integration Updated”

### 1.3. Mapping Cameras

1. To map an innoVi camera to the same device as it appears in XProtect, first retrieve the camera GUID (Globally Unique Identifier) in Milestone:

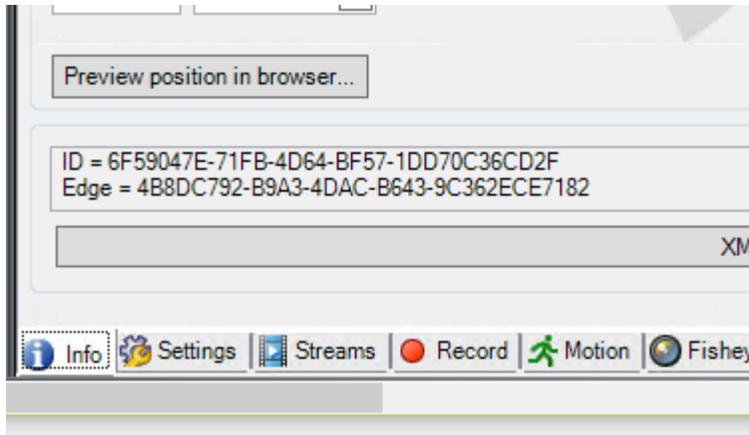
#### 1.3.1. Professional+

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
3. The camera GUID is shown beneath the camera name:

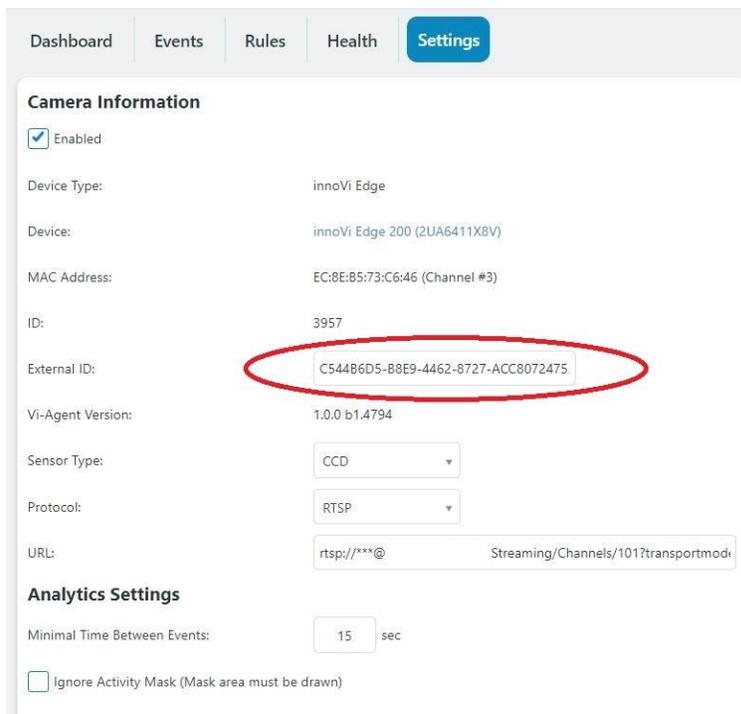


#### 1.3.2. Corporate

1. Retrieve the camera GUID in Milestone:  
The camera GUID is available in the Management Client. To find the GUID, select the XProtect Recording Server where the camera has been added, and then select the camera. Click the "Info" tab, press and hold Ctrl on your keyboard, and then click the camera's video preview



2. Go to the innoVi camera's Settings tab
3. Enter the External ID using the camera GUID for this camera in XProtect



## 2. Event Integration Using MIP

Read this section if you want to view events in Milestone XProtect.

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

### 2.1. Overview of the Integration Process

- [Install innoVi MIP Plugin](#)
- [Initialize innoVi's analytics integration](#) in XProtect Management Client
- For the most common use-case of triggering analytics events and viewing alarms in Smart Client, refer to [Configure Default Agent Vi Analytics Event & Alarm](#) and [Configuring and Viewing in Milestone Smart Client](#)

### 2.2. Installing the innoVi MIP Plugin

Install the innoVi MIP Plugin on *all* PCs hosting:

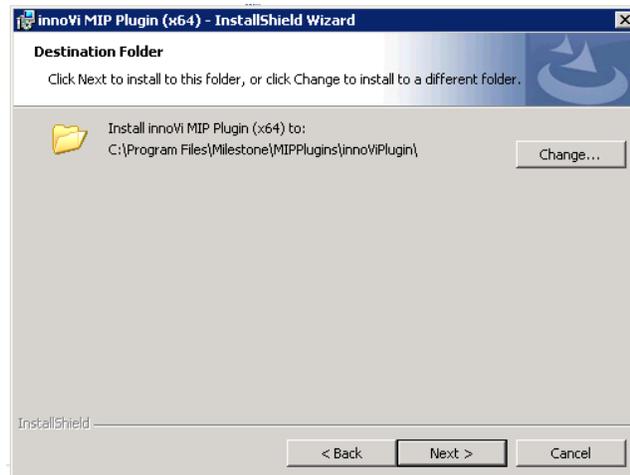
- Milestone XProtect Event Server
- Milestone Management Application
- Milestone XProtect Smart Client

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

➤ **To install the innoVi MIP Plugin:**

1. Close all Milestone's client applications such as Smart Client and the Management Client
2. Run the innoVi MIP Plugin installer file

Note: when the following window is displayed, do not change the default Destination Folder:



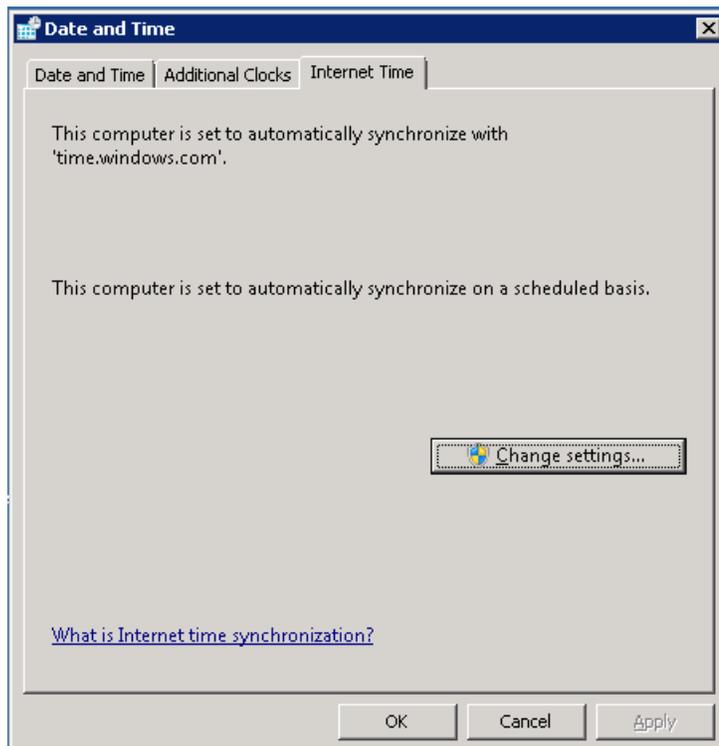
➤ **After installing the InnoVi MIP Plugin:**

1. On the Event Server PC, restart the **Milestone XProtect Event Server Service** (from Windows Services panel)
2. Start Milestone’s client applications as required

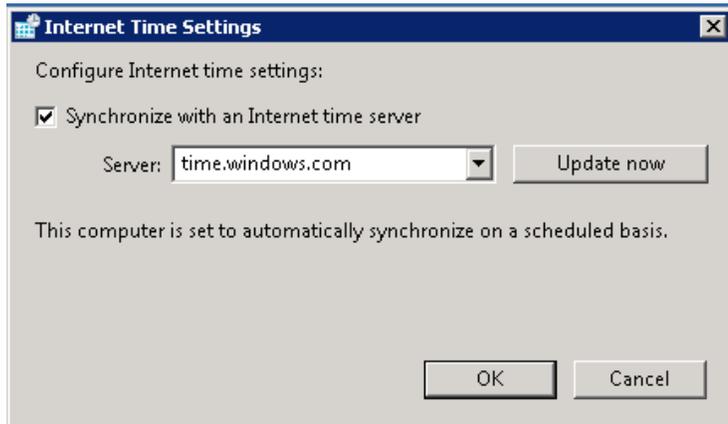
### 2.3. Synchronizing Milestone Server

Verify the Milestone server is time synchronized as follows:

In the “Date and Time” Window, click “Change Settings”



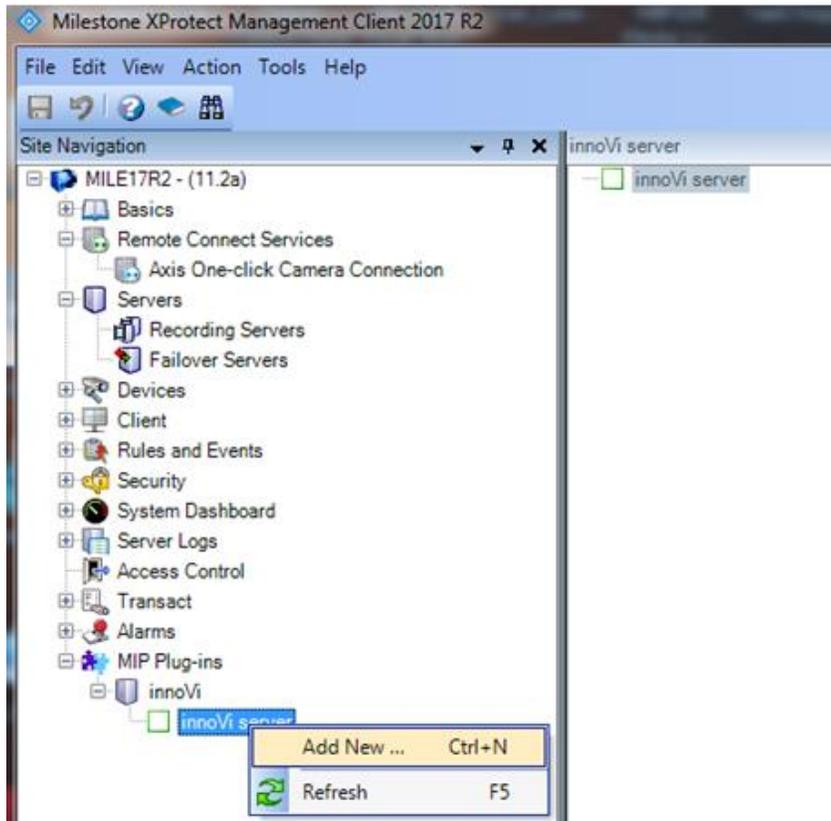
Ensure synchronization checkbox is marked:



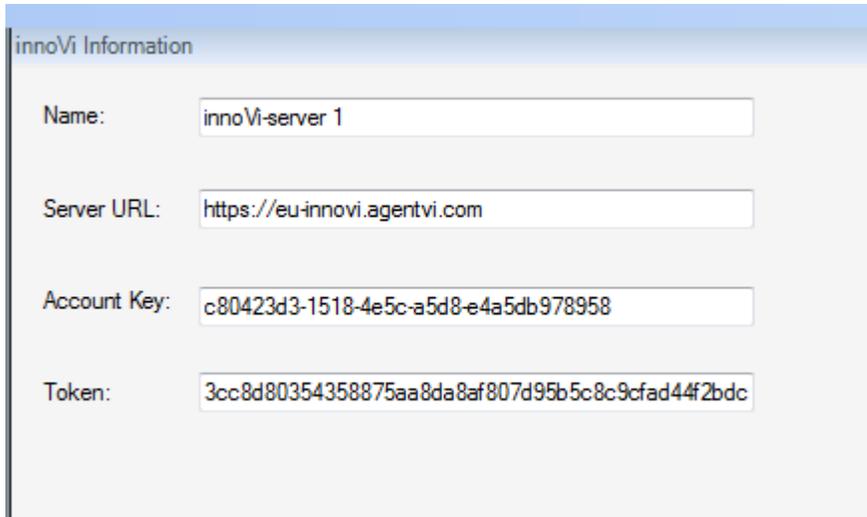
## 2.4. Initializing innoVi in Milestone Management Client

➤ To initialize the integration:

1. Open the **Milestone Management Client**
2. In the tree, expand **MIP Plug-ins** → **innoVi**
3. Right-click **innoVi** server and choose **Add New...**



4. In the opened form (see below), specify:
  - innoVi server URL (as shown)
  - Account Key (copied from innoVi account, Settings tab)
  - Token (copied from innoVi account, Settings tab)



innoVi Information

Name:

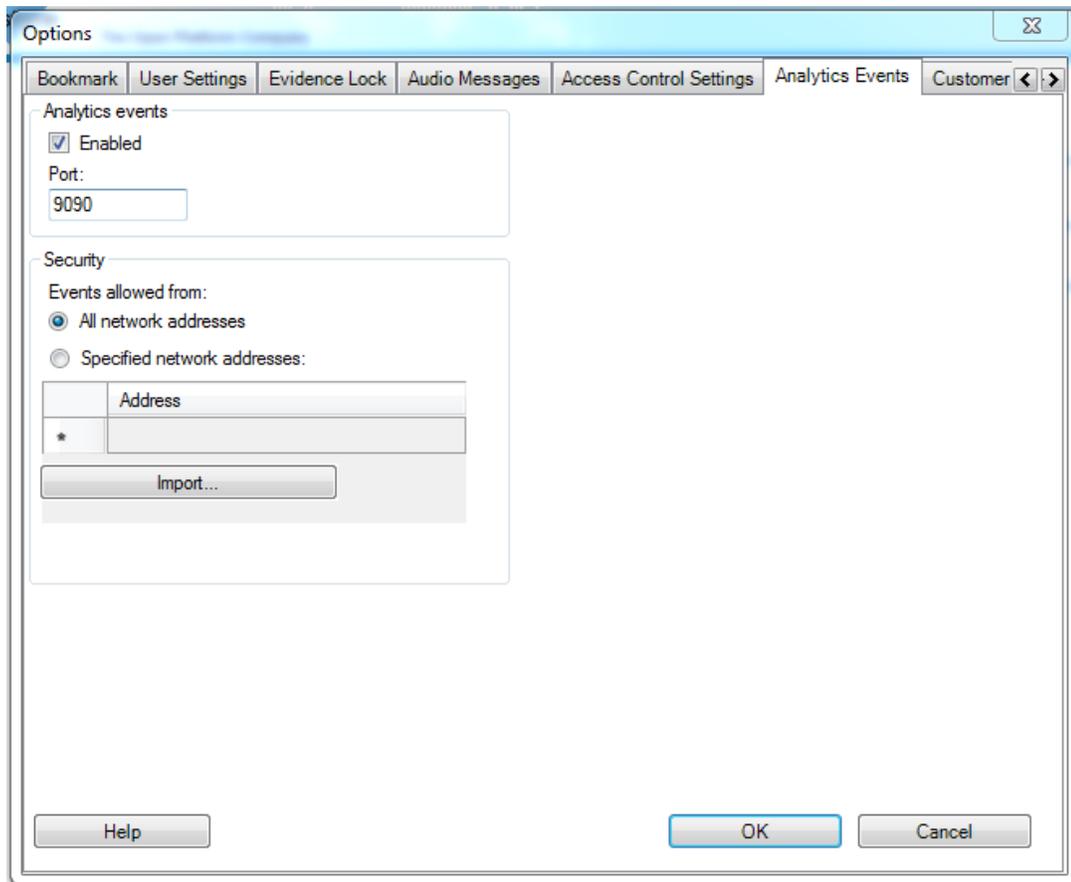
Server URL:

Account Key:

Token:

5. Verify Analytics Events are enabled:

- Open the **Options** dialog from the **Tools** menu and click the **Analytics Events** tab
- Check **Enabled** under **Analytics events**:



Options

Bookmark | User Settings | Evidence Lock | Audio Messages | Access Control Settings | **Analytics Events** | Customer

Analytics events

Enabled

Port:

Security

Events allowed from:

All network addresses

Specified network addresses:

	Address
*	

Import...

Help OK Cancel

## 2.5. Configure Default innoVi Event & Alarm

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

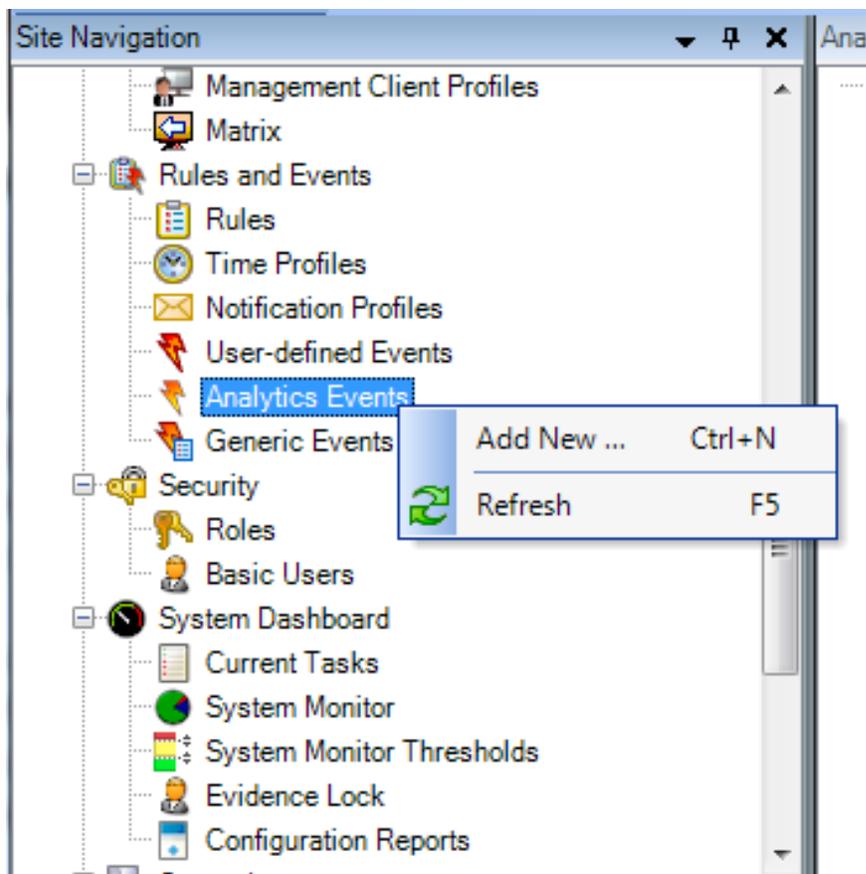
The Event/Alarm triggering flows like this:

innoVi Detection Rule → innoVi Analytics Event → XProtect Analytics Event → XProtect Alarm

### 2.5.1. Define innoVi's Analytics Event

➤ **To define an innoVi analytics event:**

1. From the Management Client tree, navigate to **Rules and Events (XPCO)** or **Events and Output** → **Analytics Events (XPE)**
2. Right-click it and choose **Add New** as shown below:



3. In the opened form (shown below), specify the event **Name** as **innoVi Event**:

**Important:**  
In Step 3 above, name the new entry *exactly* as specified: **innoVi Event**

### 2.5.2. Define an Associated Alarm

Choose the **Alarm Data Settings** node (under the **Alarms** tree) and switch to the **Alarm List Configuration** tab

1. Verify that the recommended attributes are included: **Time**, **Source**, **Tag** and **Message**. Add any of the attributes if missing
2. Right-click **Alarm Definitions** under **Alarms** and click **Add New...**
3. In the **Triggering event** field, choose **Analytics Events** in the upper list and **innoVi Event** in the lower list as shown below
4. In the **Sources** field, click **Select**; in the Select Sources screen that opens, open the **Servers** tab, choose **All cameras** and **Add** it to the Selected list
5. Save the **Alarm Definition** by clicking **OK**

### 2.5.3. Restart the Milestone XProtect Event Server service

Following completion of the above steps, restart the Milestone XProtect Event Server service for the configuration to take effect

## 2.6. Configuring and Viewing in Milestone Smart Client

1. Open the **Milestone Smart Client**
2. Define a view:
  - a. Choose a **Live** view panel on the left-hand side of the application window
  - b. Click the **Setup** button on the right-hand side of the application window:



- c. Define a new **View**: first define a new group; right-click the newly created group name and define a new view, for example, (1 + 2\*); it is unimportant which one is chosen so long as it is broad enough to contain the alarms list.
  - d. From **System Overview** drag the **Alarm List** item to the broad part of your newly created view
  - e. 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
  - f. In **System Overview**, expand the cameras list and drag the relevant cameras to the remaining views
3. When switching to the **Live View** tab:
  - a. All generated events appear in the list
4. When switching to the **Playback** tab:
  - a. The camera view switches to the relevant event time when you click on an event
  - b. The event plays back when you click the **Play** button in the Time Navigation window on the left
5. 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](#).

Alarms <i>No filter</i> ▾							
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	

## 2.7. Troubleshooting innoVi MIP Plugin Integration

Problem	Corrective Action
The user does not see <b>innoVi</b> under the <b>MIP plugins</b> node in <b>Milestone XProtect Management Client</b>	Verify the <b>innoVi MIP plugin</b> is installed
The user does not see <b>Alarm definitions</b> under the <b>Alarm</b> node in <b>Milestone XProtect Management Client</b>	Verify the <b>service</b> of <b>Milestone Event Server</b> is running
There are no analytics alarms in <b>Smart Client</b>	<ul style="list-style-type: none"> <li>• Verify the Vi-Server parameters in <b>XProtect Management Client</b> are correctly defined</li> <li>• Restart the <b>Milestone Event Server</b> if it was not restarted after defining Vi-Server properties</li> <li>• Verify <b>innoVi Event</b> is defined and a matching alarm. <b>Note it is case sensitive</b>. It must be correctly connected to the alarm definition</li> </ul>
In <b>Smart Client</b> there is no metadata (or the metadata is partial) when playing back recorded video	<ul style="list-style-type: none"> <li>• Click the <b>Play</b> button again in case it was not clicked the first time</li> </ul>
In <b>Smart Client</b> there are no alarms in <b>Alarm List</b> , the header is red, and it displays a message regarding user privileges	<ul style="list-style-type: none"> <li>• Verify the user connected to the <b>Smart Client</b> has sufficient user privileges: In <b>XProtect Management Client</b>, check the properties of the user under <b>Advanced Configuration &gt; Users</b></li> </ul>
All the above actions did not help; you are still unable to view analytics events in Milestone. Follow the instructions under the <b>Corrective Action</b> column to the right, to obtain Milestone MIP log files.	<ul style="list-style-type: none"> <li>• Enable viewing hidden files and folders on Milestone's machine</li> <li>• Open <b>Milestone XProtect Smart Client</b> installation directory. By default, it is installed at <b>C:\Program Files\Milestone\XProtect Smart Client</b> or at <b>C:\Program Files (x86)\Milestone\XProtect Smart Client</b> for 32 bit Smart Client versions</li> <li>• Open the <b>client.exe.config</b> file</li> <li>• Uncomment the commented elements in <b>&lt;Logger name="MIPLogger"&gt;</b> (Delete "<b>&lt;!--</b>" and "<b>--&gt;</b>" at the beginning and the end of the line)</li> </ul>

Problem	Corrective Action
	<ul style="list-style-type: none"> <li>• Reproduce the issue</li> <li>• Copy the <b>C:\ProgramData\Milestone</b> directory into a <i>zip</i> archive and send it to your support team</li> </ul>
<p><b>Smart Client:</b> There's no possibility of adding a <b>Tag</b> column to the <b>Alarm List</b></p>	<ul style="list-style-type: none"> <li>• Open the <b>XProtect Management Client</b></li> <li>• Choose the <b>Alarm Data Settings</b> on the right</li> <li>• Choose the <b>Alarm List Configuration</b> tab</li> <li>• Add <b>Tag</b> to the <b>Selected Columns</b> list</li> <li>• Save the new setting</li> </ul>
<p><b>Smart Client:</b> An error occurs when opening the <b>Smart Client</b> on <b>Windows Server 2008</b></p>	<ul style="list-style-type: none"> <li>• May occur because the <b>Enhanced Security Configuration</b> for the current user is turned on</li> <li>• To turn it off, open the <b>Security Information</b> in the <b>Server Manager</b> and set the <b>Enhanced Security Configuration</b> to be <b>Off</b> for the relevant user type</li> </ul>
<p>The recorded video is not synchronized with object metadata overlays</p>	<ul style="list-style-type: none"> <li>• Verify Milestone PC clock is synchronized with the cloud</li> </ul>

### 3. Contact Agent Vi Support

Review the innoVi Resources page at [agentvi.com/innoVi-resources](http://agentvi.com/innoVi-resources)

If you don't find the answer you are looking for, there are multiple ways to contact the Agent Vi Support Department:

- Use the "Contact Support" option from within innoVi (top right menu)
- Use the innoVi support form on Agent Vi's website: <https://www.agentvi.com/support/inнови-request/>
- Email [innoVi-support@agentvi.com](mailto:innoVi-support@agentvi.com)



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