



**AnalyticVideo Events**

**User Guide**

**version 1.2**

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## 1 INTRODUCTION

*AnalyticVideo Events* is the application considered as some kind of a layer between *AnalyticVideo Server* and Intelligent Video Management Software (VMS). It transforms ONVIF 2.2.1 events sent by *AnalyticVideo Server* to the form that is understandable by VMS. Currently (in *AnalyticVideo Events* 1.2) only Milestone XProtect® VMS is supported. We plan to add support of other VMSs in future. At the same time you can connect AnalyticVideo Server with your VMS (has to support ONVIF) on your own using [AVS Dev Support](#) and [AVS 1.2 VA](#) guides.

## 2 System Requirements

*AnalyticVideo Events* application does not have any specific hardware requirements. It is recommended to be run on the same computer as Milestone XProtect® VMS.

Software requirements for the [installation](#) are:

- Operating system — Windows XP SP3, Windows Vista SP2, Windows 7 SP1, Windows Server 2008 or Windows 8;
- Microsoft .NET Framework 4.0.

Software requirements for connection to [Milestone XProtect® VMS](#) are:

- Milestone XProtect® VMS **Essential** edition or higher.

## 3 Adding AnalyticVideo Server in Milestone XProtect®

To add *AnalyticVideo Server* channels in Milestone XProtect® VMS do the following:

- Start XProtect Manager Application.
- Select “Wizards” in the left menu.
- Select “Add Hardware Devices” [Figure 1].

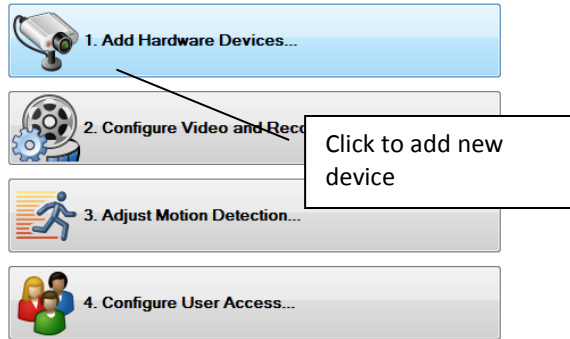


Figure 1. Adding Hardware Device in Milestone XProtect Manager

- Select “Manual” from the list of detection methods.
- Fill in *AnalyticVideo Server IP*, port (always use **13088** – the port to add multichannel ONVIF device), any password (ONVIF device does not need it, but the wizard will not let you continue with empty password). [Figure 1.2].
- Select “ONVIF Conformant Device” (if you have one active channel in AVS) “ONVIF Conformant Device (2-16 channels)” from the list (if you have more active channels than one) [Figure 2].

Specify hardware information and select the hardware driver manually.  
Optionally use 'Auto-detect' to detect the hardware driver automatically.

Status:

Use	Address	Port	User Name	Password	Hardware Driver	Verified
<input checked="" type="checkbox"/>	192.168.33.5	13088	<default>	*****	ONVIF Conformant Device (2-16 channels)	<input type="checkbox"/>
<input type="checkbox"/>		80	<default>	Enter password	Auto-detect hardware type	<input type="checkbox"/>

Figure 2. Filling in *AnalyticVideo Server* information.

- XProtect device wizard does not understand which channel is active at the moment, so it allows selecting active *AnalyticVideo Server* video channels by yourself [Figure 3].

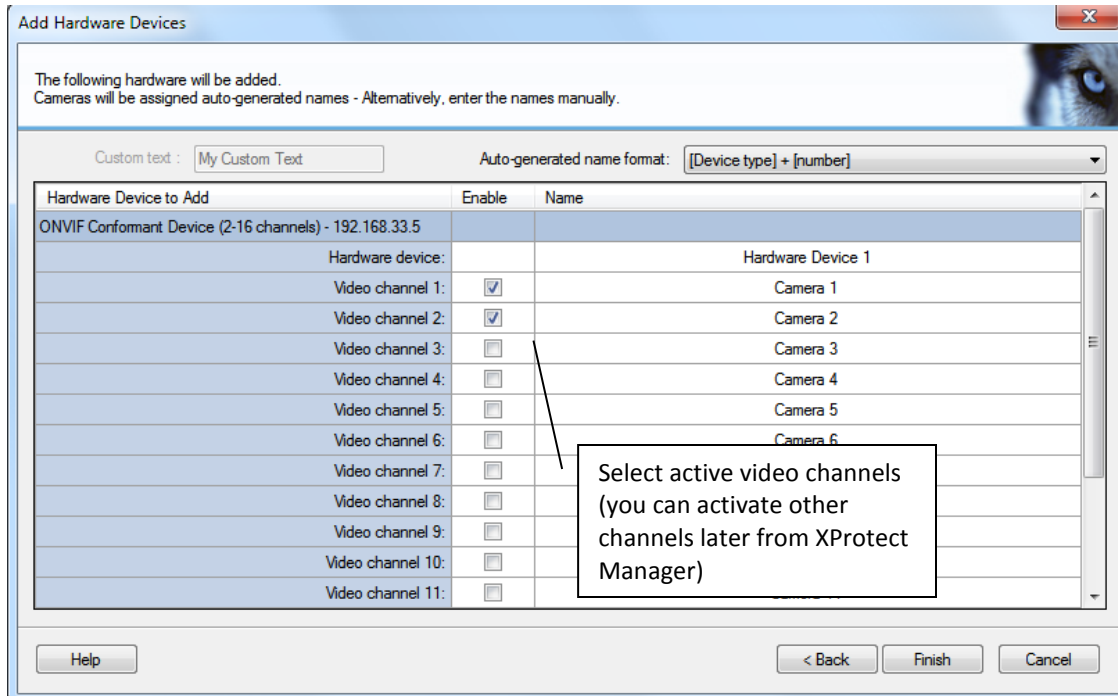


Figure 3. Selecting channels.

For *AnalyticVideo Server* **version 1.2.4.0 or older** Milestone XProtect® VMS has difficulties reading some “H264” video streams, including *AnalyticVideo Server* video stream, so you have to change this profile to “MPEG4” or “MJPEG”. In AVS version 1.2.5.0 or higher all media profiles work fine.

By default, Milestone XProtect® VMS uses port 80 to access its services. However, very often this port is closed by firewall or used by other applications. To change the default port number go to “Server Access” and change the “Local port” to something not common, e.g. 8181 [Figure 4].

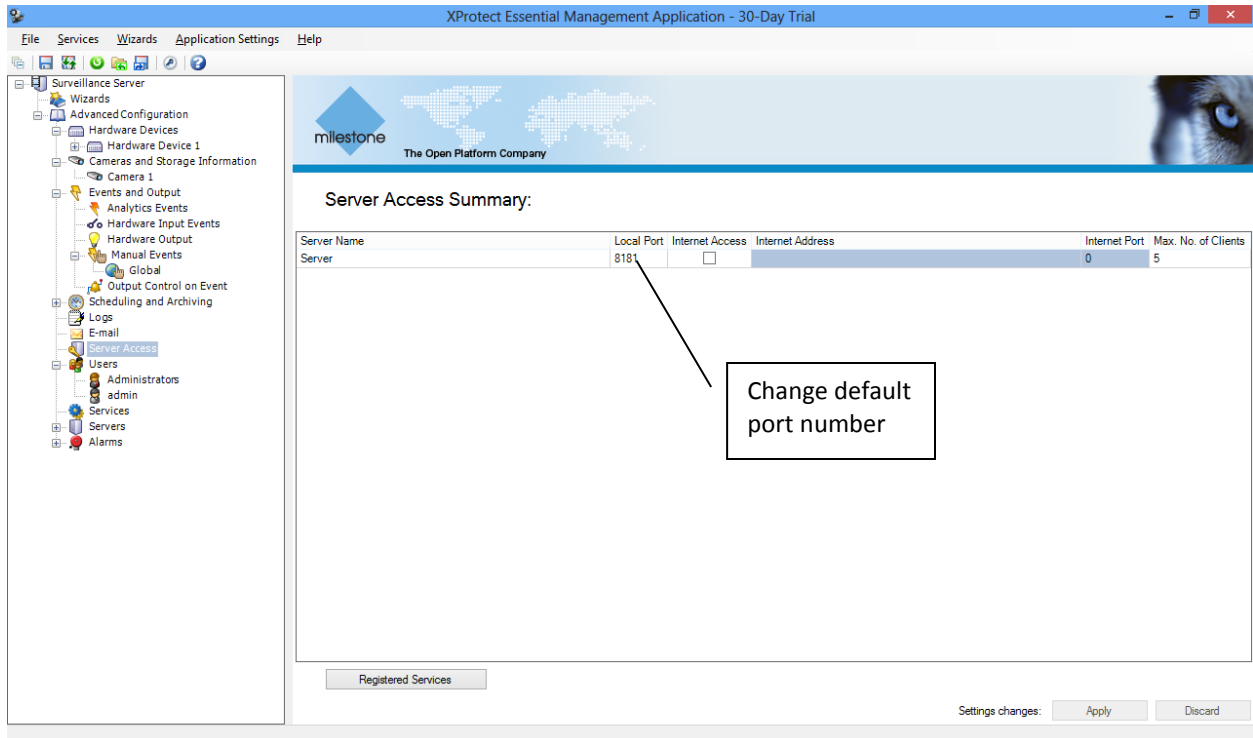


Figure 4. Changing default port.

- Select any camera and right click on it. Select “Properties” [Figure 5].

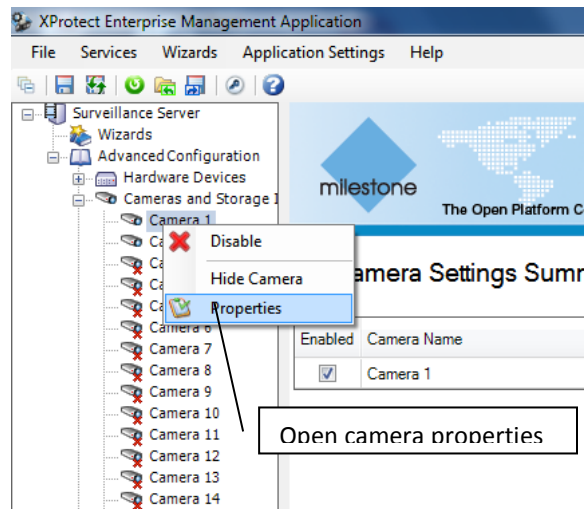


Figure 5. Changing camera settings.

- In “General” menu item press “Camera Settings...”.
- In the “Profile” drop-down list, select preferred resolution and profile (do not use “H264” profiles), select any “MPEG4” and “MJPEG” profiles instead. [Figure 6].

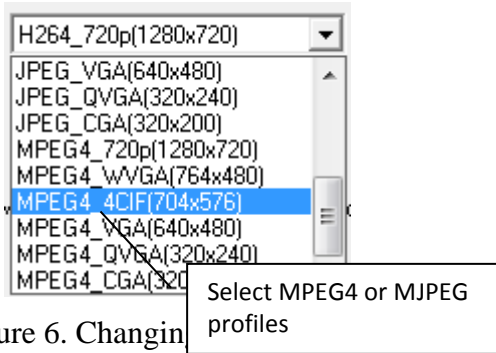


Figure 6. Changing

- Now reconnect to the selected camera one or two times by just clicking on camera group and the camera itself (it takes a few seconds to restart encoding using new profile). Now you can see the camera video stream [Figure 7].



Figure 7. Video from the camera.

- Do the same steps for other active channels.



Don't forget to always save your configuration with the "save and apply configuration" button in the top menu. Wait for the Milestone XProtect® to restart all services.

#### 4 Transmitting ONVIF events to Milestone XProtect®

*AnalyticVideo Events* software is intended to transmit ONVIF events, generated by AnalyticVideo Server, to Milestone XProtect® VMS.

To attach *AnalyticVideo Server* camera to Milestone XProtect® camera and to send ONVIF events to Milestone XProtect® do the following:

- Start AnalyticVideo Events.
- Select “Milestone”-”Connect”. You shall see the connection dialog [Figure 8]. Fill in Milestone XProtect® server address and credentials.



If you changed the default Milestone XProtect® port number, your server address should look like this: **http://192.168.33.236:8181/**

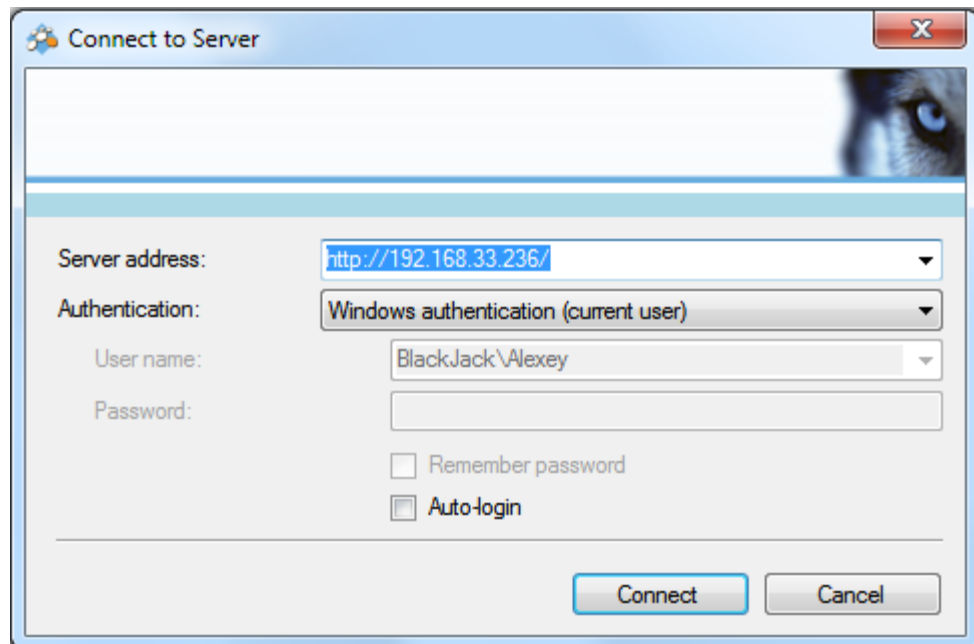


Figure 8. Milestone XProtect® connection dialog.

- If succeeded, Milestone connection status will turn to green [Figure 9].
- Add *AnalyticVideo Server* source by clicking “Sources”-“Add new” [Figure 9]. Select *AnalyticVideo Server* camera by searching it using ONVIF tab (if *AnalyticVideo Server* discovery services are running currently) or using RTSP tab (manual mode).



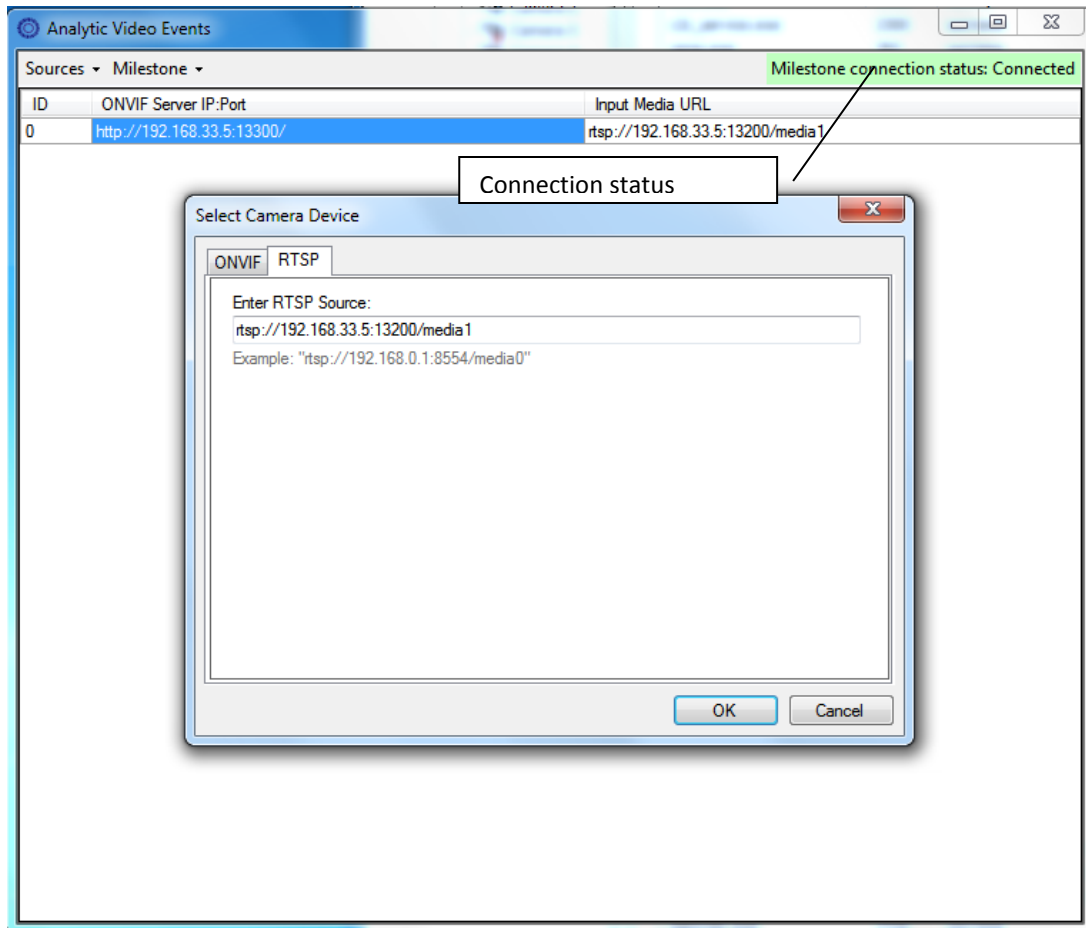


Figure 9. Adding *AnalyticVideo Server* virtual camera.

- To preview added camera select it and press F3 (or press “Sources”-“Preview selected”).
- Now you must link Add *AnalyticVideo Server* camera to Milestone XProtect® camera to understand the video source of events. To do this select added source from the list and press “Milestone”-“Link Source”. Select corresponding camera from Milestone XProtect® dialog [Figure 10].

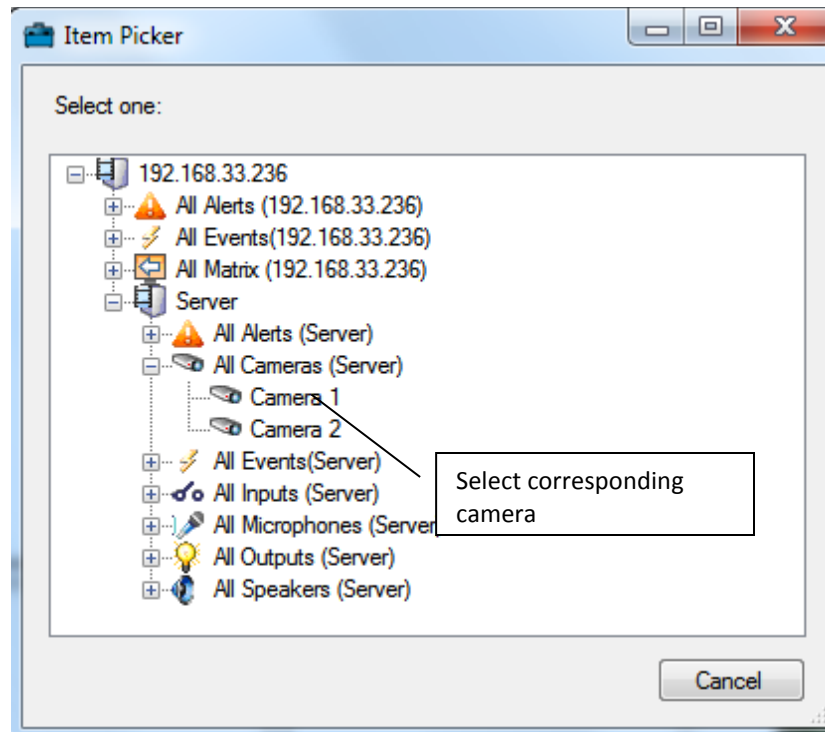


Figure 10. Attaching Milestone XProtect® camera to AnalyticVideo Server camera

- Now open Milestone XProtect Smart client, add AVS camera to the default view using drag-and-drop.
- For Milestone XProtect® Enterprise: select “Alarm Manager” tab and see all the events that have occurred. Click on the event to watch the corresponding video from the archive [Figure 11].

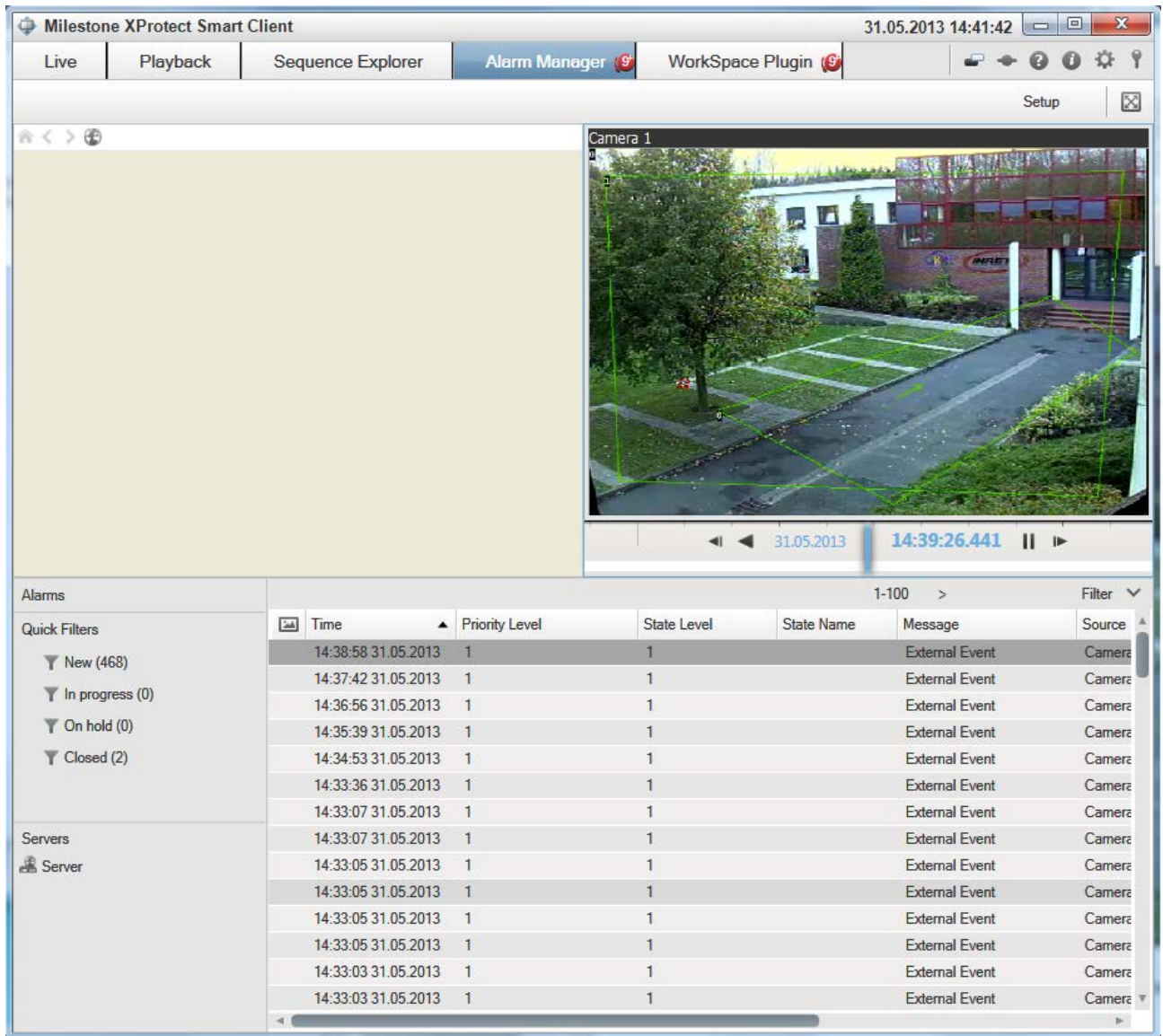


Figure 11. Watching video analytic events in Milestone XProtect® Enterprise Smart Client.

- For Milestone XProtect® Essentials: to use *AnalyticVideo Server* events you must add a list of Milestone XProtect® alarms. Press “Setup” button in the top right corner. Go to System Overview-Alarms-Alarm List and drag-and-drop it to the unoccupied frame in the default view. Also you can add the alarm preview list. To do this go to System Overview-Alarms-Alarm Preview and drag-and-drop it to the unoccupied frame in the default view. The result will look like this [Figure 12]. Now you can select any alarm from the Alarm list. Corresponding part of video sequence will be shown in the Alarm Preview frame.

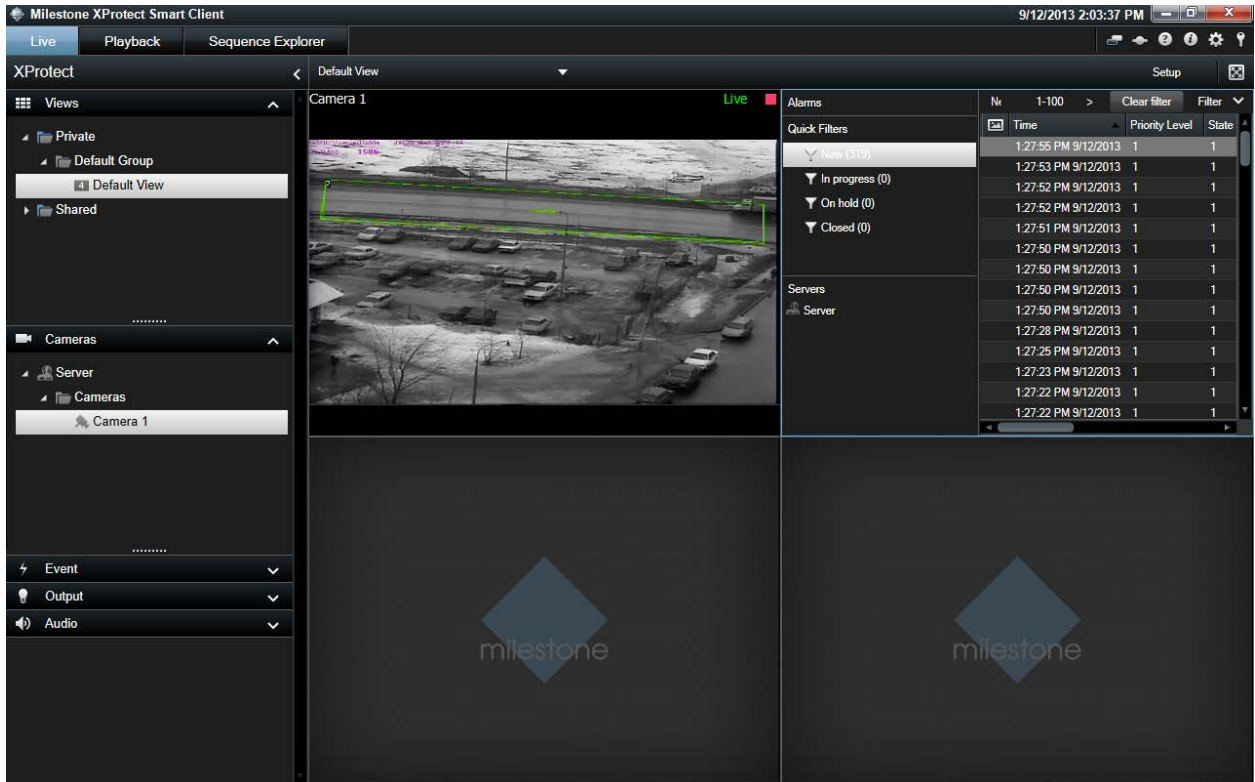


Figure 12. Watching video analytic events in Milestone XProtect® Essentials Smart Client.

However, access to the alarm description is granted only in Milestone XProtect® Enterprise. Double-click the alarm to see the description [Figure 13].

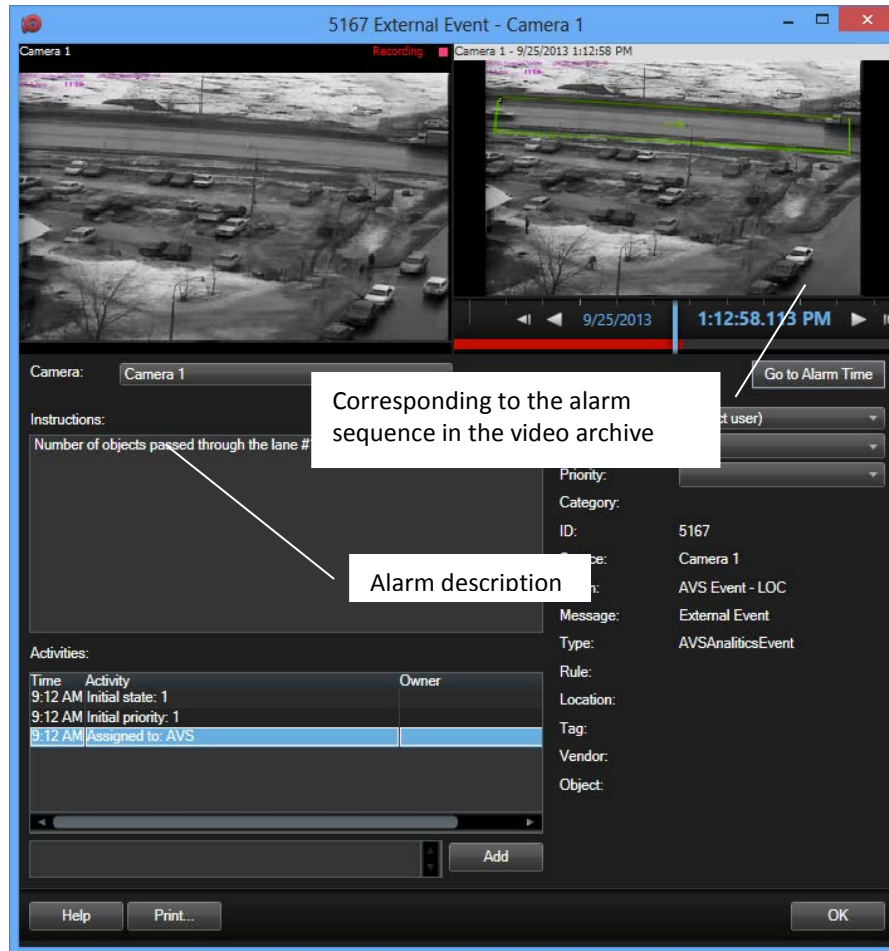


Figure 13. Milestone Image Server service did not start correctly.

## 5 Troubleshooting Milestone XProtect®

Milestone XProtect® software has a very well known bug: "Milestone Image Server" service accidentally may not start correctly. As a result, you can see neither camera video, nor AnalyticVideo events (called "Alarms" in Milestone XProtect). To solve this problem manually restart "Milestone Image Server" service in the list of Windows services (Windows Control Panel-System and Security-Administrative Tools-Services) [Figure 14].

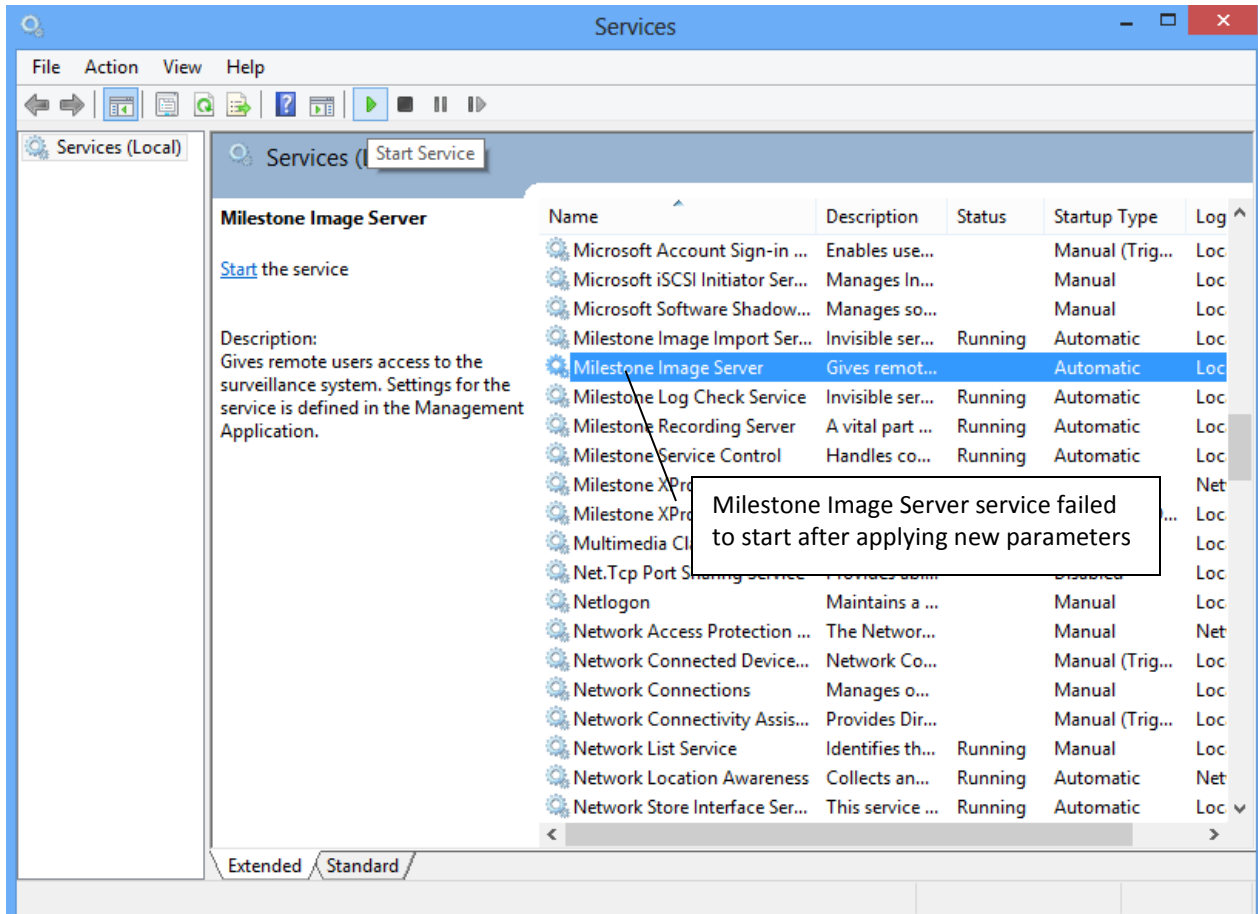


Figure 14. Milestone Image Server service did not start correctly.

## 6 CONTACT US



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