SureView Response (On Premises) Milestone Documentation

The following is a system-to-system integration that requires an integration license and may require additional support than a standard SureView integration.

The configuration of the integration in SureView is simple and follows a standard set of functionality that is exposed by the SureView API and in this document. However these advanced systems have a wide variety of custom settings that can affect the performance of this integration. As such it's important to budget for professional services from the SureView support team to assist in configuring your system to work with SureView and also to tailor the integration if needed to your unique custom setup. Please contact your sales representative for details about our professional services.

Integration Summary

What is Milestone? It is a Video Management Software (VMS) system.

Integration Description: The Integration is an advanced system-to-system integration and is a VMS platform that allows a user to view live camera along with recorded camera footage, perform remote tasks such as relay activation/deactivation, perform audio communication and supports multiple alarm types. A variety of this functionality can be used via the SureView platform, Please see the features list for a full breakdown of this.

Supported Features

- Alarms
- Post Alarm Recording
- Pre Alarm Recording
- Live Video
- Camera Playback
- PTZ
- Audio Transmit
- Relays/Output
- Get Config & Sync

Components and Communication

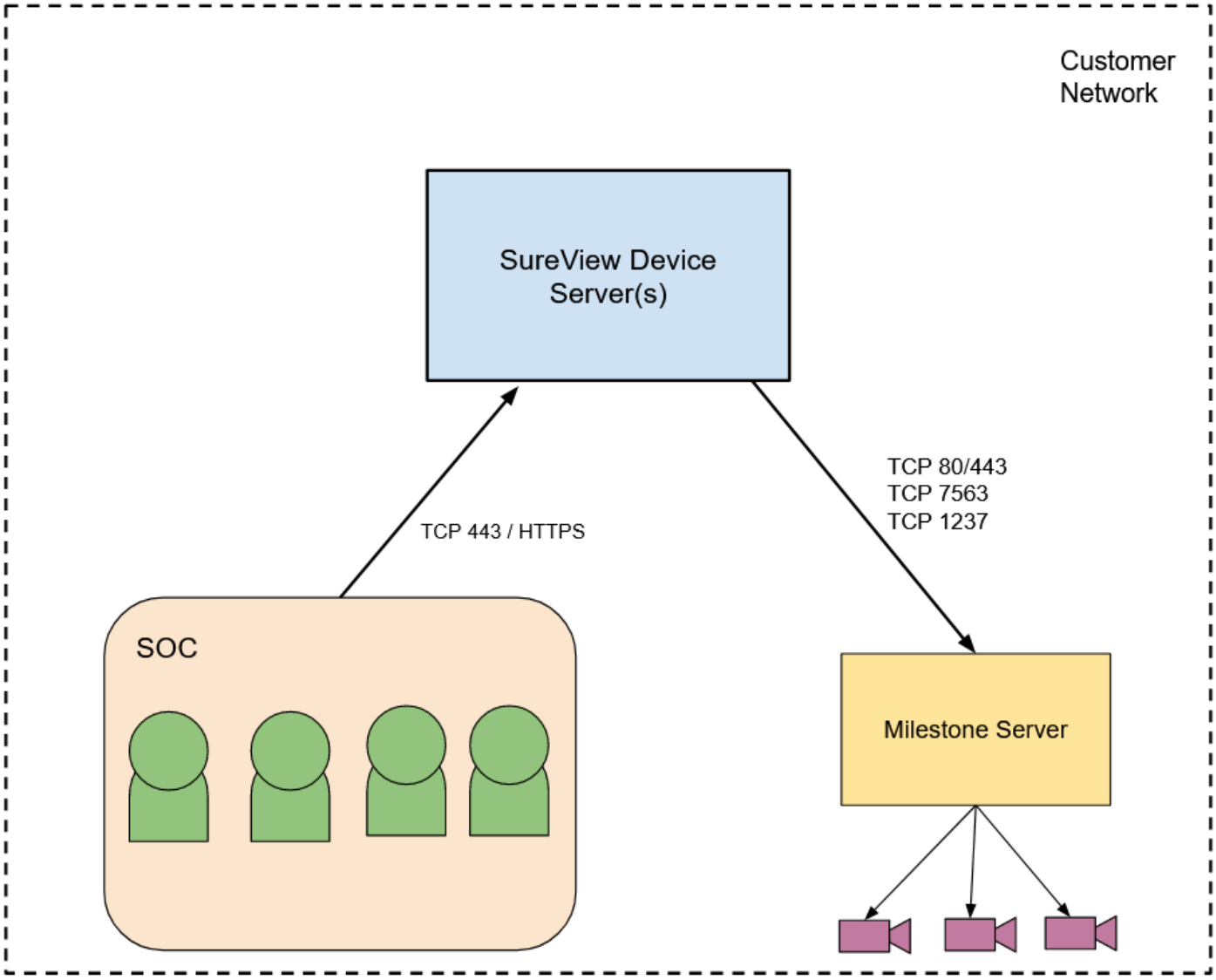
From	To	Port	Use
SureView Device Server	Milestone Server(s)	80/443 TCP	Commands and authentication
SureView Device Server	Milestone Server(s)	7563 TCP	Video
SureView Device Server	Milestone Server(s)	1237 TCP	Alarms

Prerequisites

SureView Device Server - Minimum Spec

- **OS**: Windows Server 2012 (or newer) Standard edition (or higher).
- **CPU**: 16GHz total
- **RAM**: 8GB total
- **HDD**: 100GB
- **Type**: Virtual or Physical (Virtual recommended to allow growth)
- **Redundant Hardware**: the PSUs, NICs, and HDDs of the physical server must be redundant
- **Network Access**: the following network access is required...
    1. To the Milestone Server(s) on TCP Ports: 80/443, 7563, 1237
    2. To the SureView installer in online mode: "download.sureviewsystems.com:443

Communication Diagram



Milestone Configuration

The following are the steps required to configure Milestone to work with the Sureview.

Before you begin

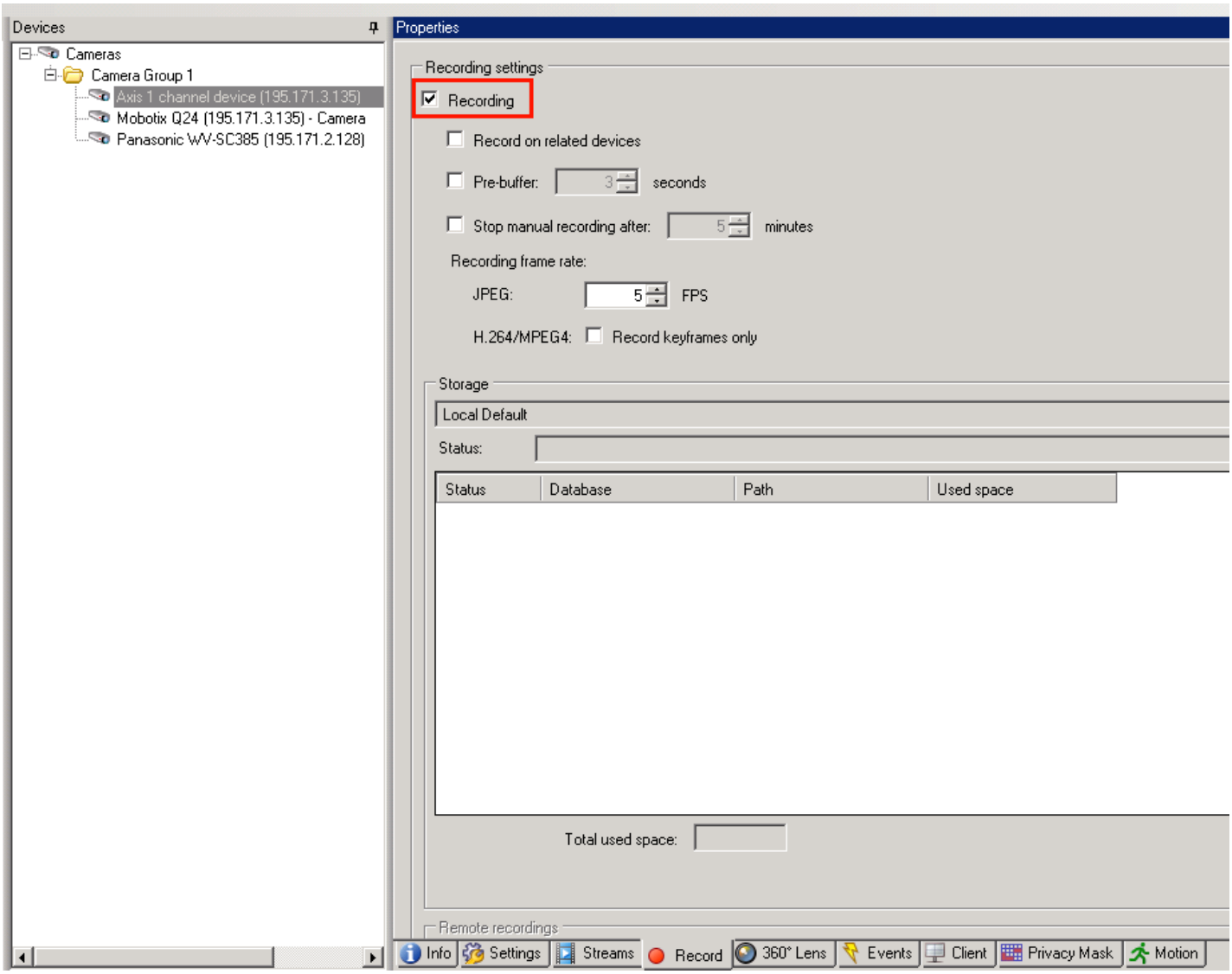
Before you configure your Milestone system to work with Sureview make sure you have the following:

- A fully licensed Milestone server (see Supported Milestone Versions)
- A configured SureView Device Server with the "Milestone Native" integration installed
- You must be able to load the Milestone XML page from the SureView Device Server
  (it must contain data & not be blank)
  https://host:port/rcserver/systeminfo.xml
  e.g.: https://192.168.1.12/rcserver/systeminfo.xml
- All required ports configured (see Components and Communication)
- Username and password of your Milestone account
- If using Basic Authentication you must enter **authmode=basic;** into the Authentication and Cameras field prior to Sync/Get Config (see Device Setup)
- Camera Streams set to H.264 (preferred)

Milestone Continuous Camera Recording

Required for “Pre Alarm Recording” and “Camera Playback”
To allow SureView Users to be able to request playback footage on demand and include “PreAlarm Recording” on alarm receipt it’s recommended that Milestone is set to Continuous Camera Recording. This will ensure that any required footage will be available.

Navigate to the camera to record 'Devices -> Camera 1 (camera name)'. Select the record tab and ensure that the "Recording" checkbox is selected:

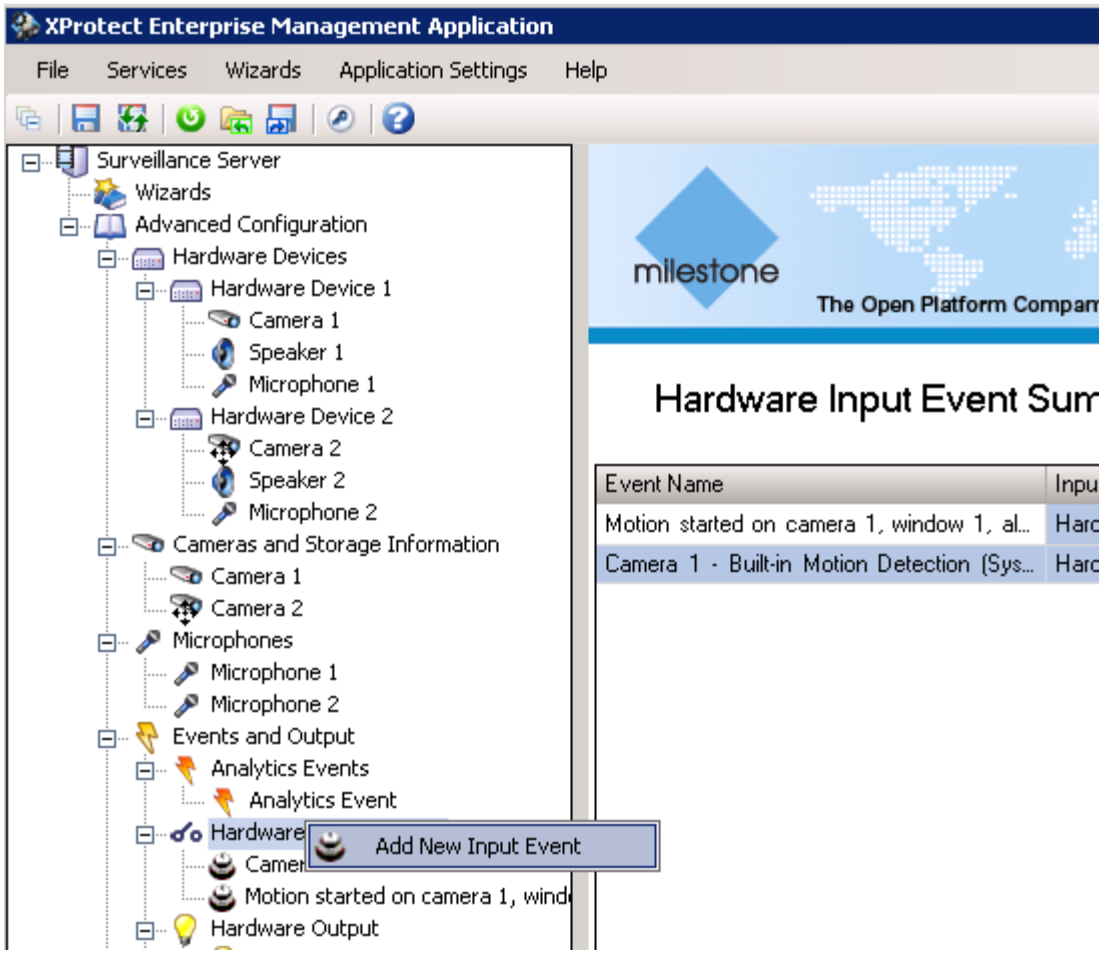


Milestone Alarms

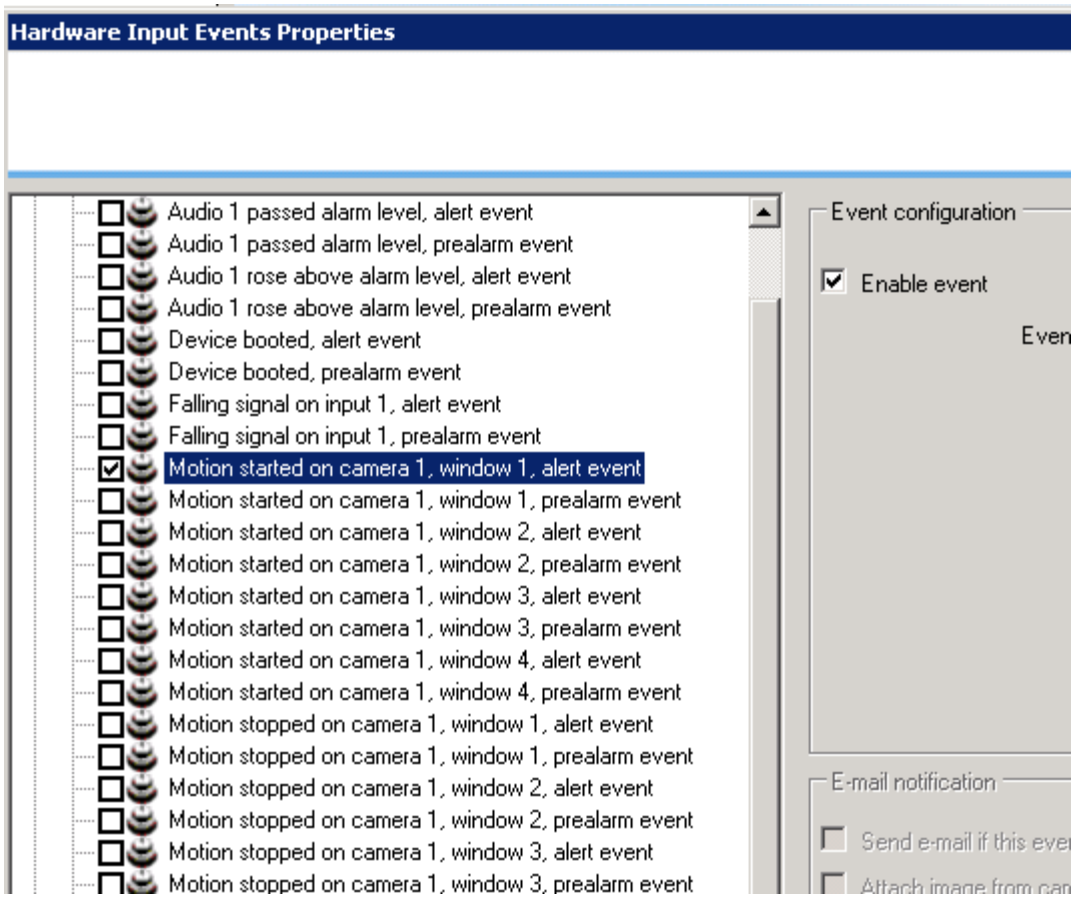
Please note that all alarms received from the Milestone Enterprise are in UTC format. This means that the Device Time that appears in Sureview (in the event details) will be UTC.

Milestone Enterprise Alarms

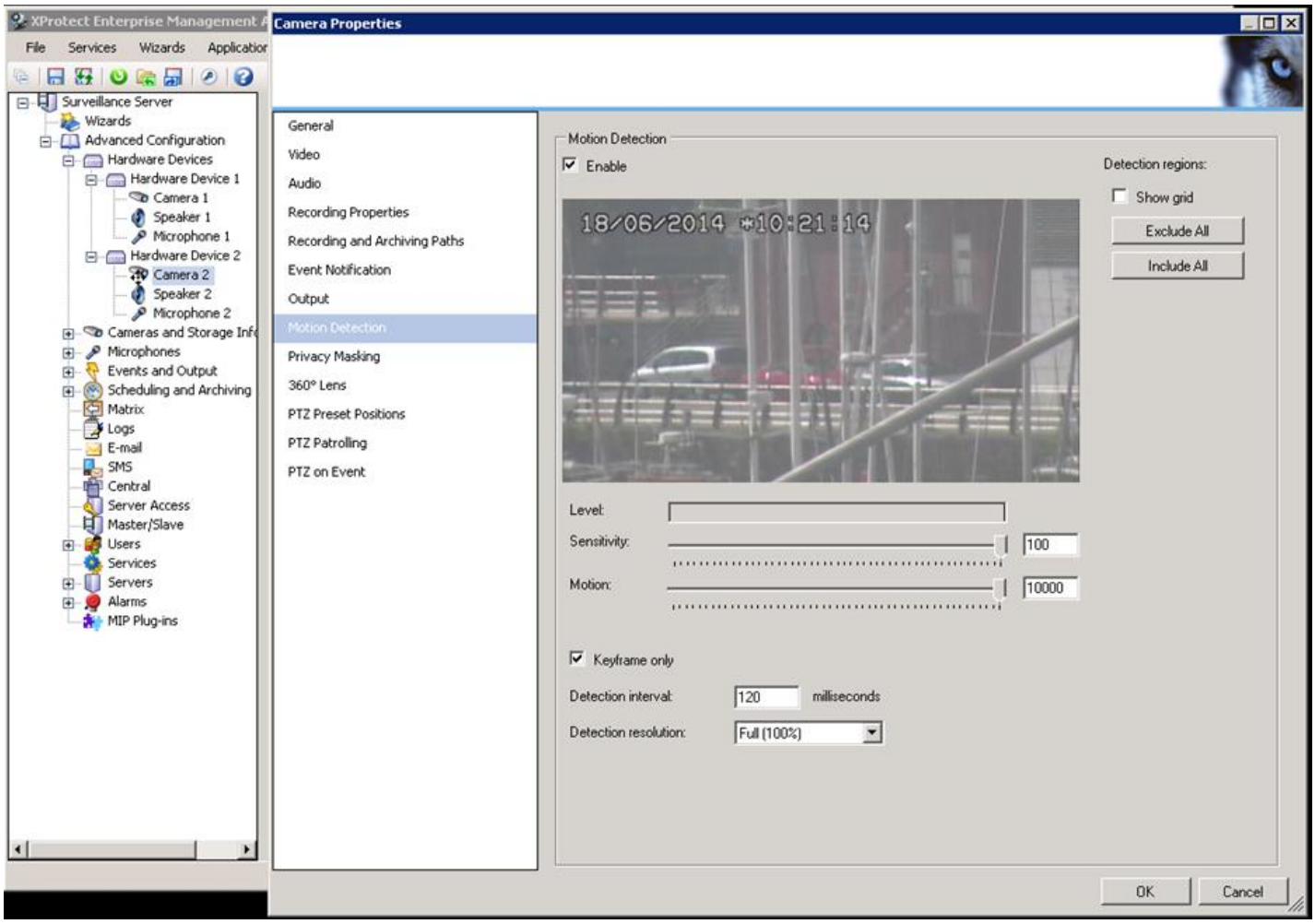
Go to 'Events and Output' -> Go to Hardware Input Events -> Right Click and Select 'Add New Input Event'



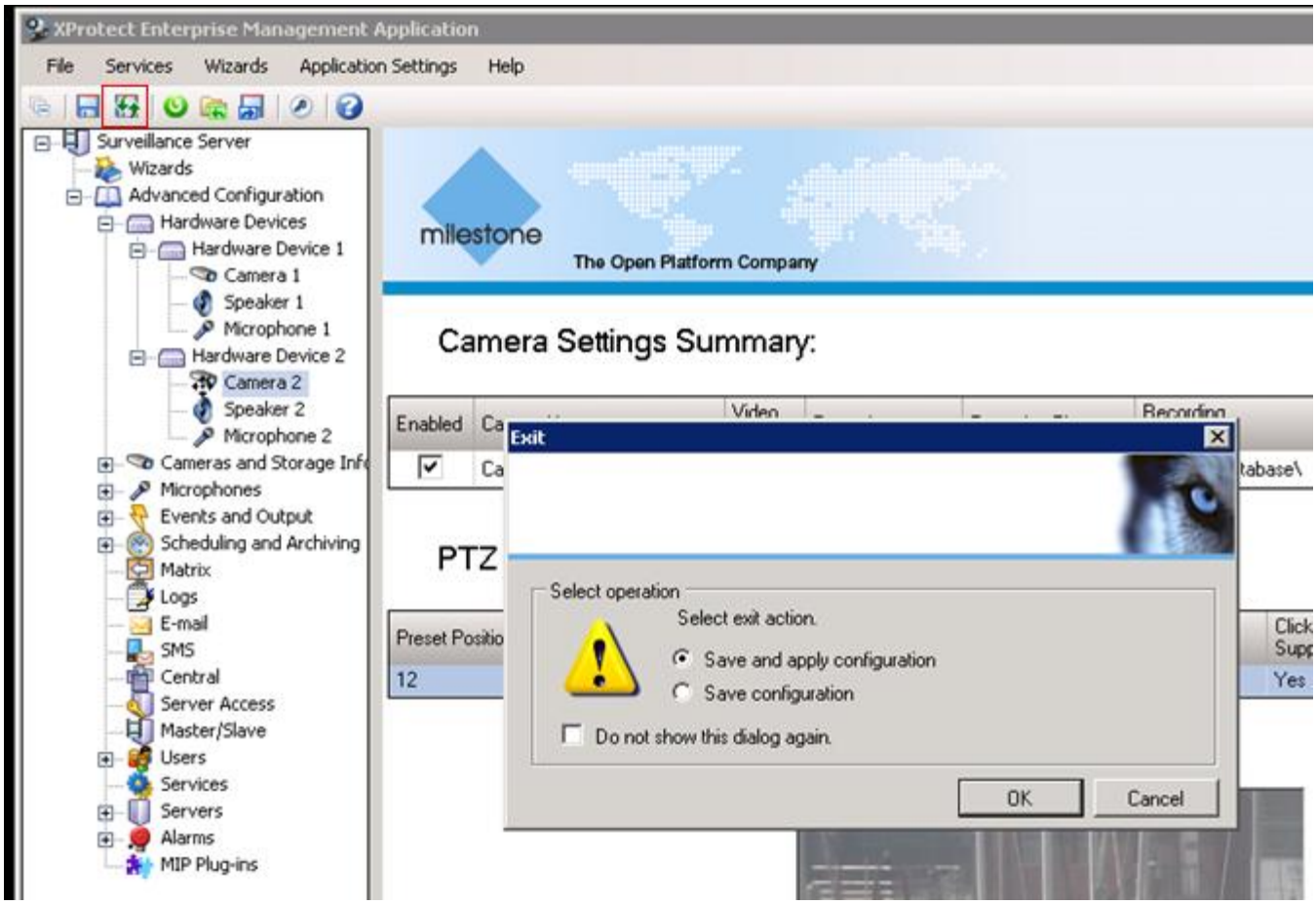
From here Select the Hardware device you wish to alarm with, and select the event to trigger the alarm:



To setup the area for 'Motion Detection Alarms' -> Right click on 'Camera' -> Navigate to 'Camera Properties' -> Click on 'Motion Detection'. Within the motion detection window the sensitivity and detection zones for triggering alarms can be modified. Adjust these settings as required and click 'Ok'

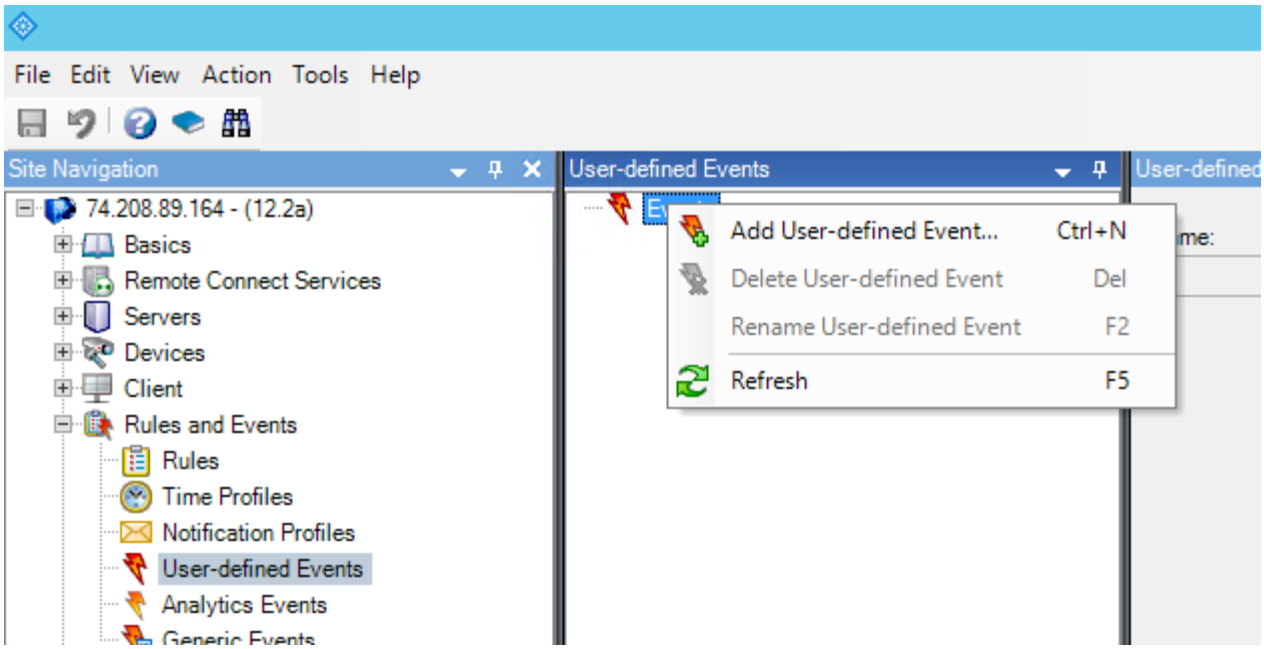


After making all the changes, click on the below button (which is on the top left corner) to save and apply all the changes (or close the client application to save and apply changes).

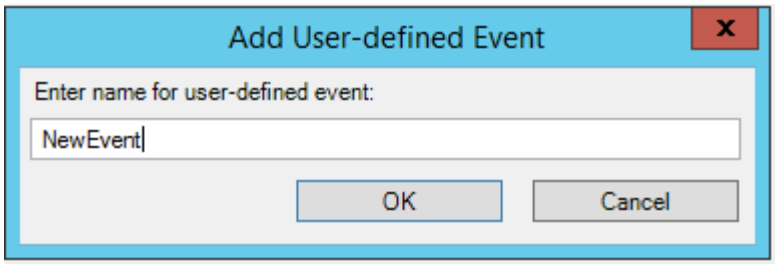

XProtect Enterprise Management Application
File
Services
Wizards
Application Settings
Help
Surveillance Server
Wizards
Advanced Configuration
Hardware Devices
Hardware Device 1
Camera 1
Speaker 1
Microphone 1
Hardware Device 2
Camera 2
Speaker 2
Microphone 2
Cameras and Storage Inf
Microphones
Events and Output
Scheduling and Archiving
Matrix
Logs
E-mail
SMS
Central
Server Access
Master/Slave
Users
Services
Servers
Alarms
MIP Plug-ins
milestone
The Open Platform Company
Camera Settings Summary:
Enabled
PTZ
Preset Positio
12
Exit
Select operation
Select exit action.
Save and apply configuration
Save configuration
Do not show this dialog again.
OK
Cancel

Milestone Corporate External Alarms

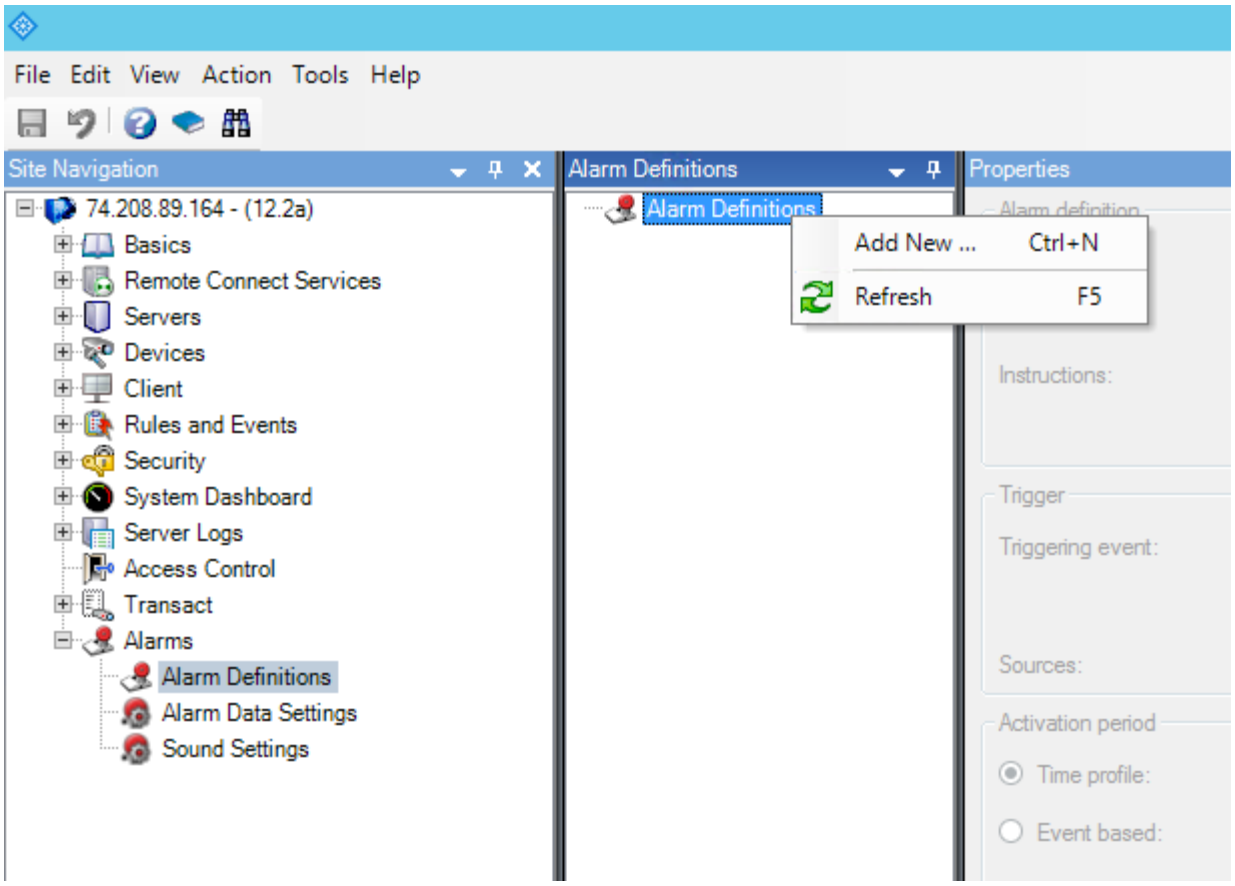
Go to 'Rules and Events' -> Right click on 'Events' -> Click 'Add User-defined Event...'



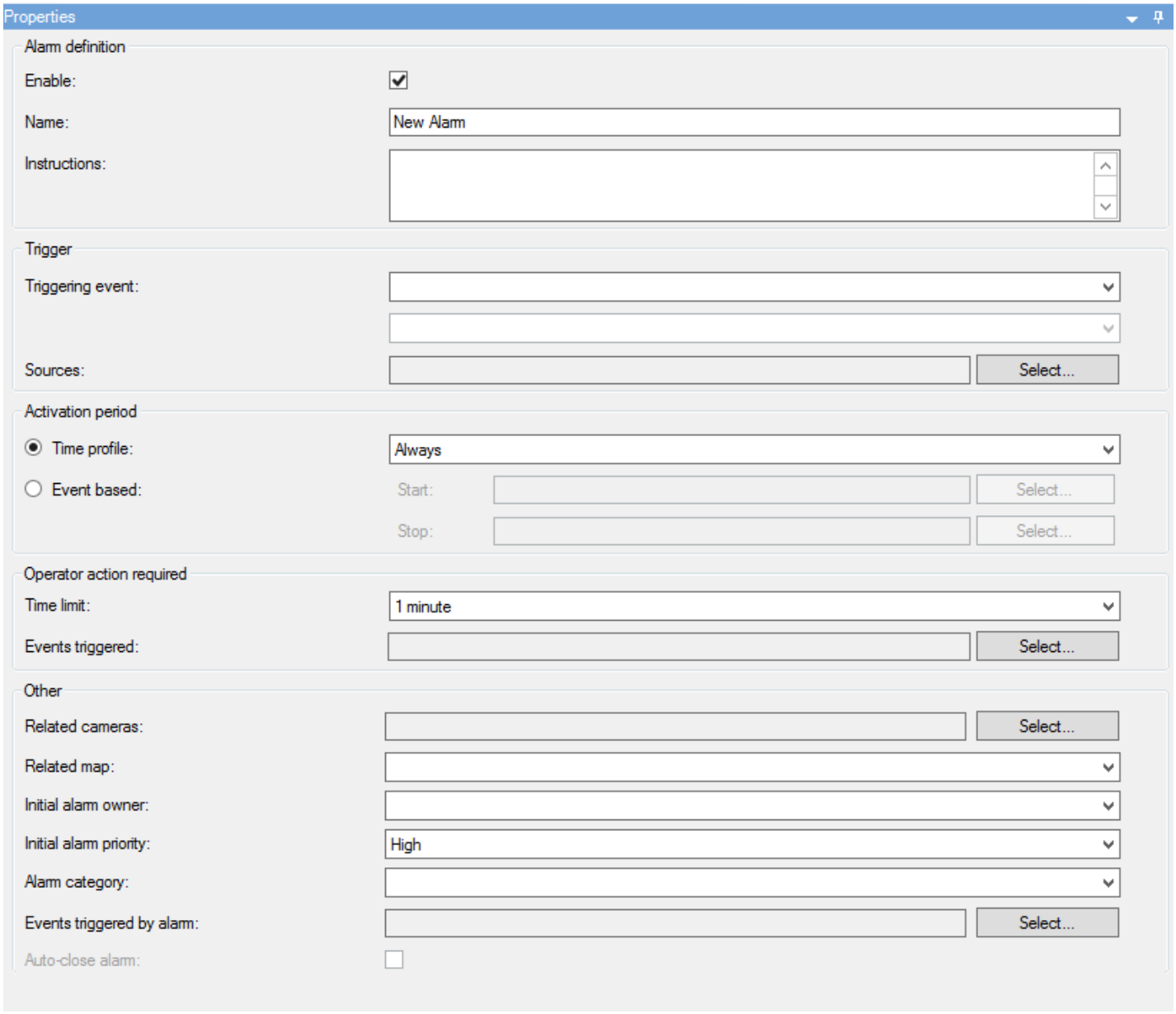
Enter a name for your event.



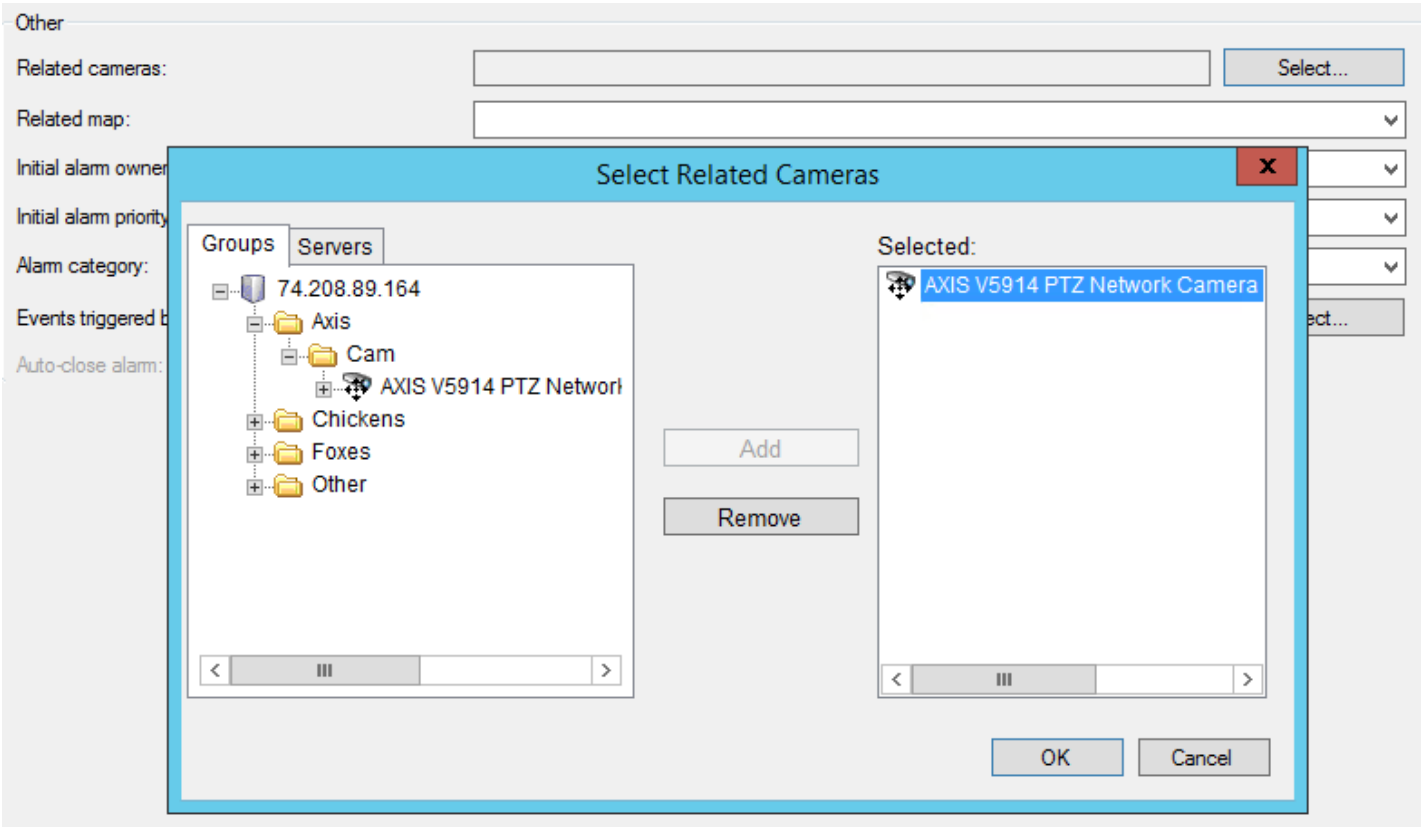
Go to 'Alarms' -> 'Alarm Definitions' -> Right click 'Alarm Definitions' -> Click 'Add New ...'



You will then be given numerous options to configure your alarm. Start with giving your new alarm a name.



You can then choose the triggering event which will activate this alarm. This can link to multiple events. To to this start by selecting "External Events" in the drop down menu. You can then select the event which you just created in the previous steps.



You can then add a related camera which will link to all of the source events. If the Milestone server is running Milestone Corporate 2018 r2 or higher then these cameras will be associated with their alarms within Sureview.

Once you have finished configuring the alarm, click the save button located within the toolbar.

Sureview Configuration

The following are the steps required to configured this integration in the Sureview interface.

Before you begin

Before you configure Sureview to work with Milestone make sure you have the following:

- Open ports on your Sureview server
- Username and password of your Milestone account
- Playback requires continuous recording to be setup on the Milestone device,
- If using Basic Authentication - Milestone must be configured to use a HTTPS connection (port 443 by default)

Details for the following are listed below.

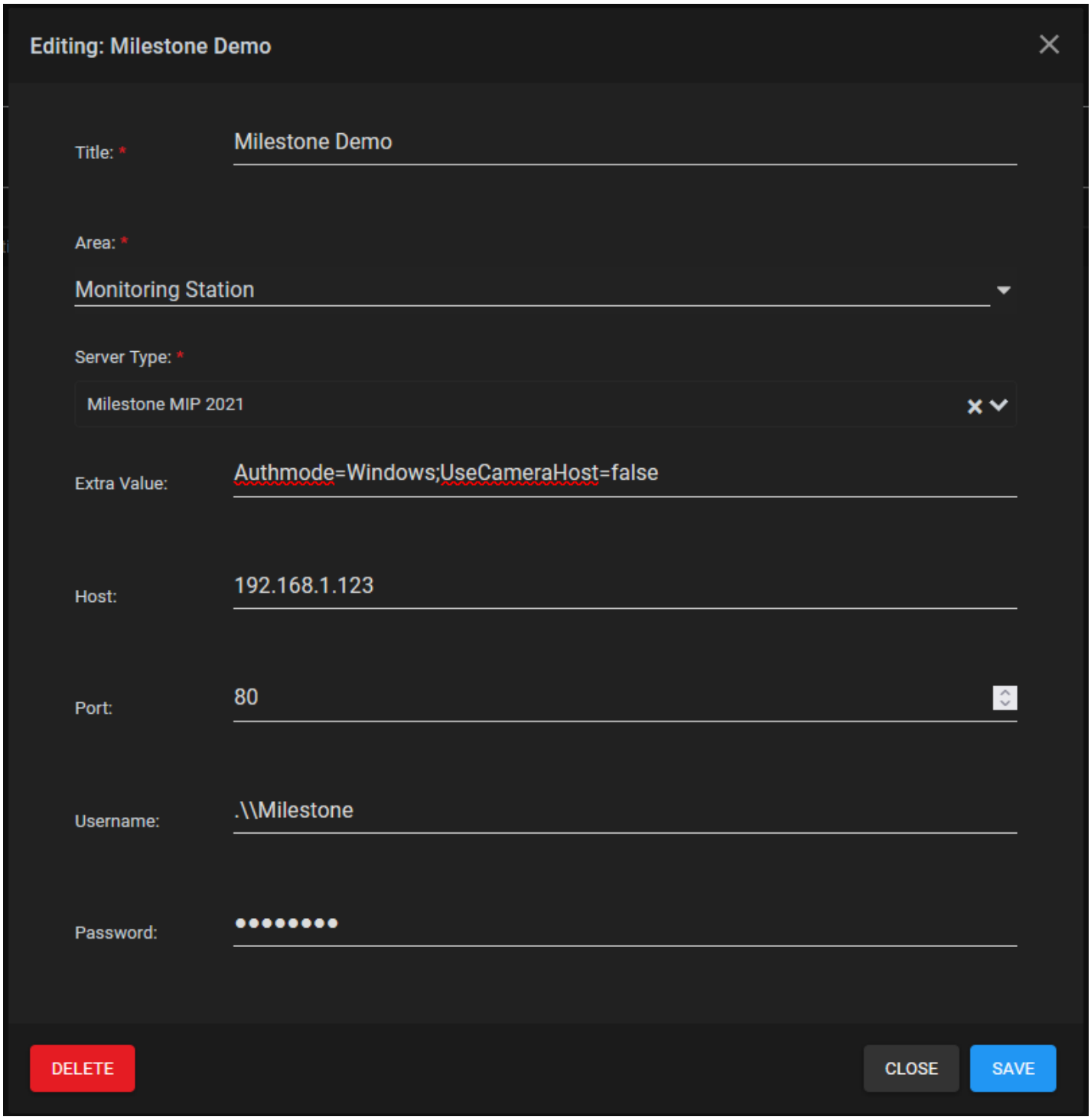
SureView Device Setup

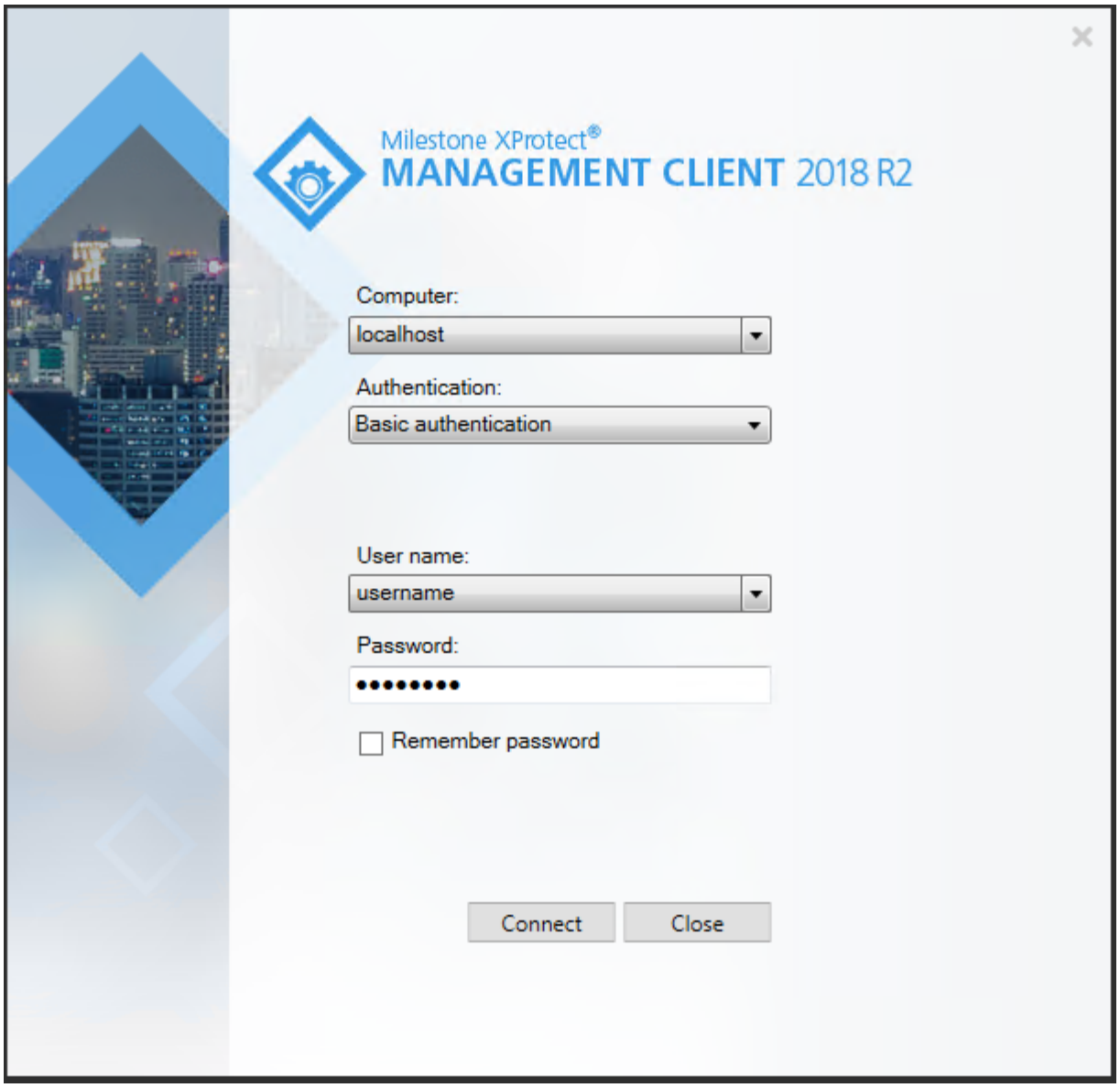
Sync system

The Sync System connects to the Milestone Server in order to automatically synchronize cameras and alarm points in SureView.

1. Navigate to the **Sync** Setup Page
2. Select the “**Sync Systems**” tab
3. Click **Add Sync System**
4. Complete the Sync System Fields (see table below)
5. Press **Save**

Field	Value
Title	The friendly name of the Milestone Server you are connecting to
Area	The root area for the Sync System. This is normally set at the top account level.
Server Type	Select "Milestone MIP 2021"
Extra Value	AuthMode=Windows; or AuthMode=Basic; Specifies the authentication mode that should be used when connecting to Milestone.. *(Note: Basic Authentication requires a HTTPs connection on port 443 by default)* UseCameraHost=true; or UseCameraHost=false; Used for the device connections: When set to false SureView will connect using the Milestone Server's IP address rather than the Camera's Hostname (DNS)
Host	The local IP address of the Milestone Server (from the perspective of the SureView Device server)
Port	The web port for the Milestone software. (Default 80)
Username	Your Milestone username (See image below)
Password	Your Milestone password (See image below)


Editing: Milestone Demo
Title: *
Milestone Demo
Area: *
Monitoring Station
Server Type: *
Milestone MIP 2021
Extra Value:
Authmode=Windows;UseCameraHost=false
Host:
192.168.1.123
Port:
80
Username:
.\\Milestone
Password:
DELETE
CLOSE
SAVE



The image above shows the login page for the Milestone management client, you must use the same credentials in Sureview as you would use here.

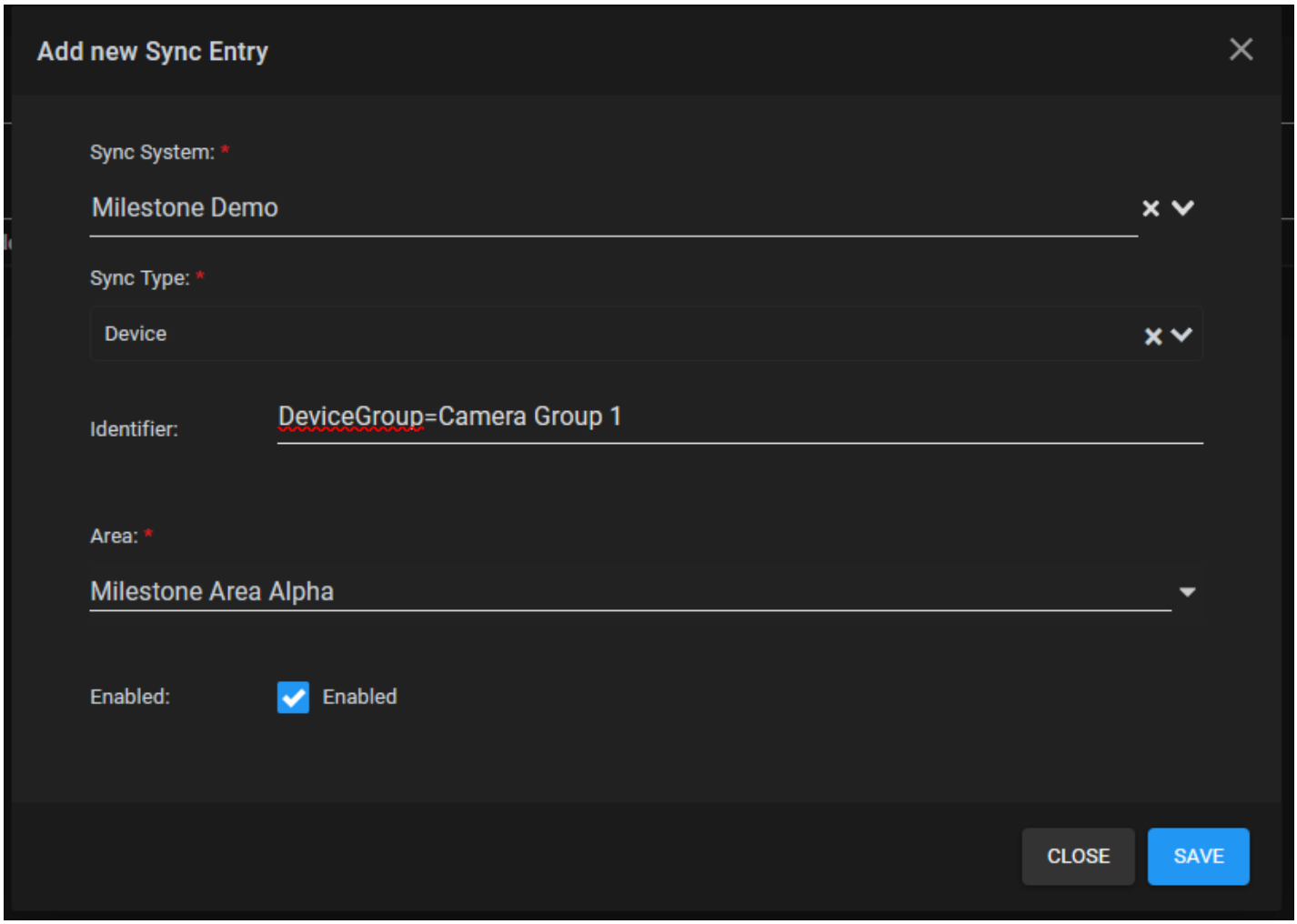
Sync Entries

This allows you to organize the system so the cameras and alarms are synced to the appropriate SureView Areas. You should configure at least one Sync Entry per SureView Area that needs to be synced with Milestone.

1. Navigate to the **Sync** Setup Page
2. Select the "**Sync Entries**" tab
3. Click **Add Sync Entry**
4. Complete the Sync entry Fields (see table below)
5. Press **Save**

Once the Entries have been synced your operators will be able to view the Milestone Cameras and Alarms in the appropriate areas

Field	**Value**
Sync System	Select the Milestone Sync System that you have already configured
Sync Type	Select **Device**
Identifier	*See Sync Identifier Options table.*
Area	The Area you want to sync the Milestone cameras/alarms in to
Enabled	Option to enable or disable the Sync Entry.


Add new Sync Entry
Sync System: *
Milestone Demo
Sync Type: *
Device
Identifier:
DeviceGroup=Camera Group 1
Area: *
Milestone Area Alpha
Enabled:
Enabled
CLOSE
SAVE

Sync Identifier Options

Parameter Name	"Authentication and Cameras"	Example	Description
Engine Name	Engine=(Engine Name);	Engine=North Building;	Used with the "Sync" feature to automatically configure the devices filtered by the "Engine Name" parameter
Device Prefix	Prefix=(Device Name Prefix);	Prefix=North;	Used with the "Sync" feature to automatically configure the devices filtered by the "Device Prefix" parameter
Device Group	DeviceGroup=(Device Group Name);	DeviceGroup=Group1; DeviceGroups=Group1,Group2,Group3;	Used with the "Sync" feature to automatically configure the devices filtered by the "DeviceGroup" parameter
Alarm Prefix Syncing/ GetConfig	AlarmPrefix=(Alarm Name Prefix)	AlarmPrefix=Alarm; AlarmPrefix=Alarm Number *;	sed with the "Sync" feature to automatically configure the devices filtered by the "Alarm Prefix" parameter

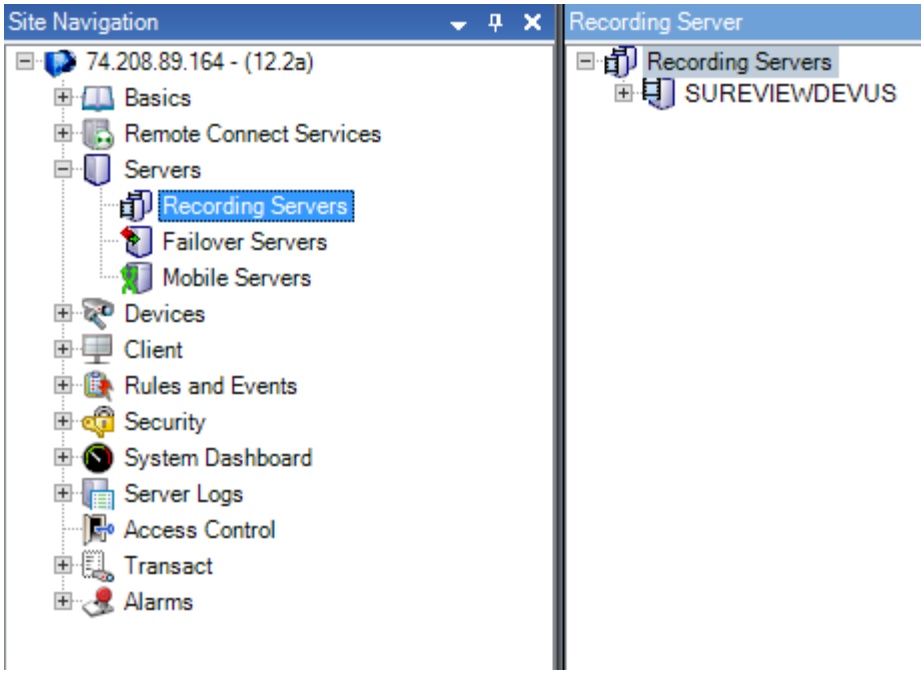
Engine Name ("Recording Servers")

Milestone engines can be used when setting up cameras with "Sync".

For example: using the parameter **"Engine=North Building**;" during the Sync process will automatically download all of the camera details for the North Building.

Engines can be found in Milestone as “Recording Servers”.

Note: Multiple engines are NOT currently supported.



Device Prefix

A Device Prefix can be used when setting up cameras with "Sync" to automatically download the details for any devices/cameras with a matching name

For example: using the parameter **"Prefix=North** ;" during the Sync process will automatically download all of the devices with a name that starts with "North" across all milestone Engines/Recording Servers.

It is possible to sync the events within Milestone, this will attempt to match the prefix value to any Milestone Event names. An example of where these can be found is shown in the image below.

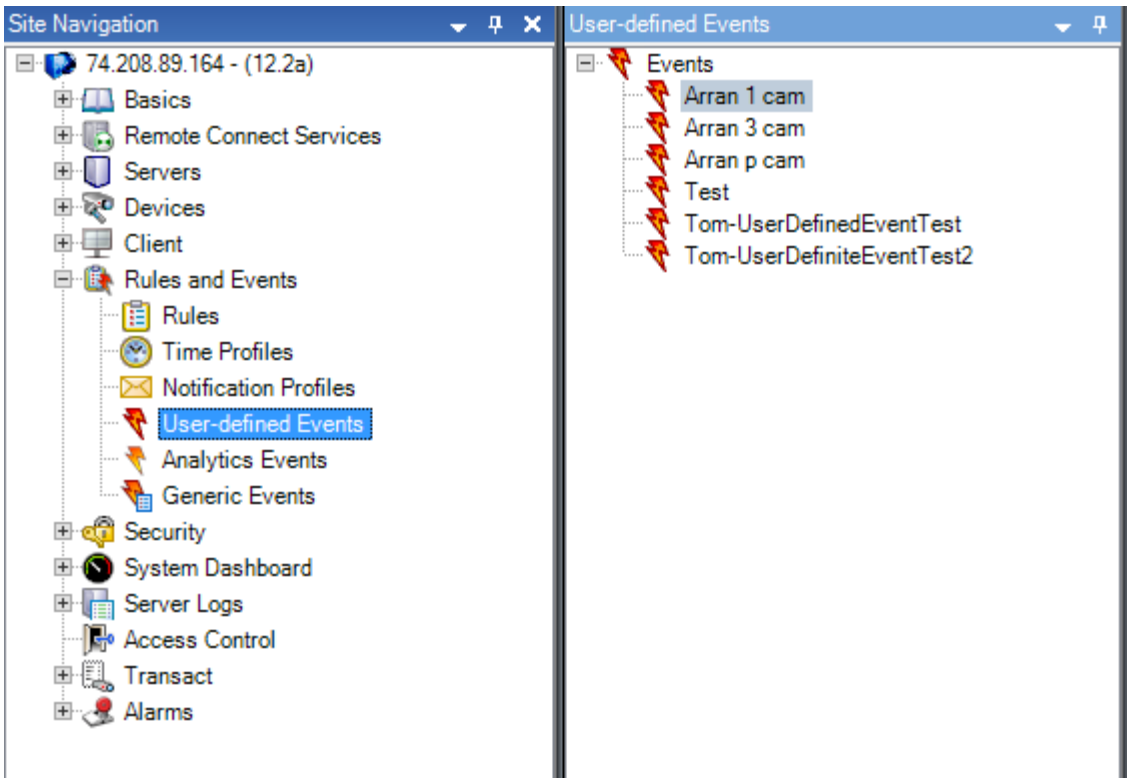
Enter the prefix of which you would like to sync into the SyncIdentifier. You can use the wildcard character (*) in here to bypass any unknown characters

If no AlarmPrefix is entered into the sync identifier then no external events will be added to Sureview.

Examples
AlarmPrefix=Tom;

AlarmPrefix=Arran * cam;

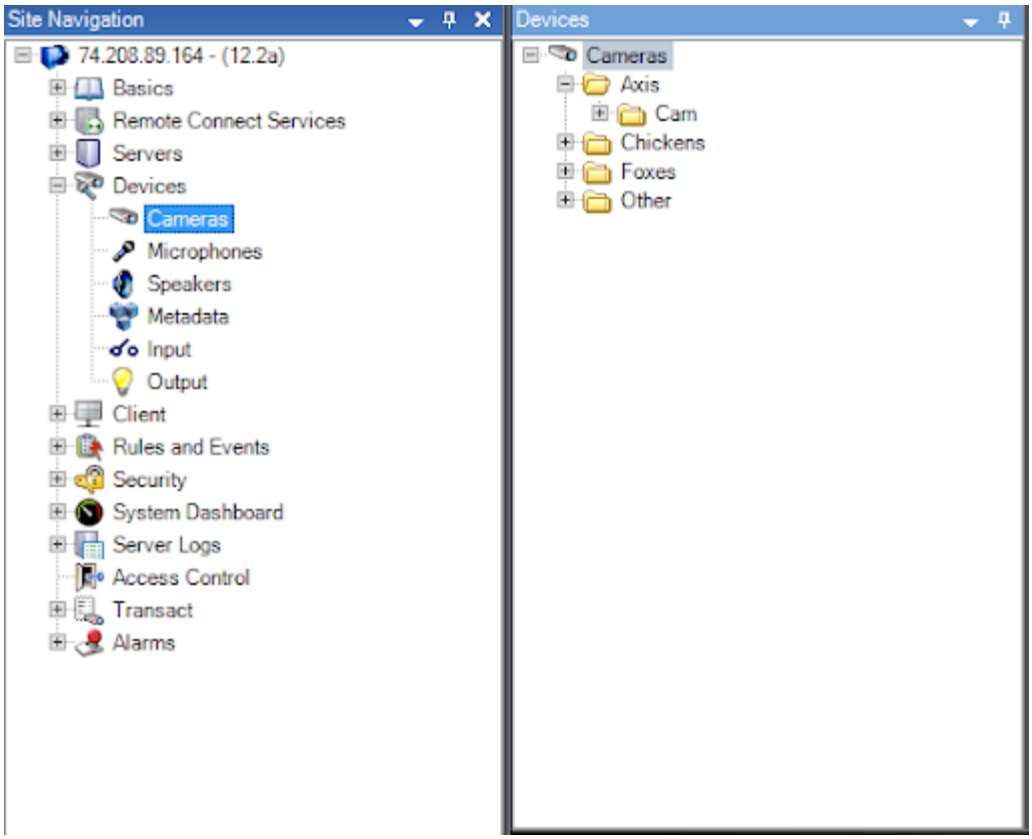
AlarmPrefix=*;



Device Group

One or more Device Groups can be used when setting up cameras with "Sync" to automatically download the details for any devices within the listed Device Groups. Device groups can be found in Milestone under “Devices”. The image below shows the camera device groups.

For example: using the parameter "**DeviceGroup=Axis;**" during the Get Config process will automatically download all of the devices within the Axis group. Or if you use the parameter "**DeviceGroups=Chickens,Axis,Foxes;**" you will be able to get the details of all devices in the Chickens, Axis and Foxes groups



Troubleshooting

Camera Stream Issues

SureView Presponse works best with video encoded as H.264 to be streamed from cameras and video systems. Please ensure that the Milestone Camera Streams are set to H.264 within the Milestone Software.

If a different stream type has been selected it can cause unexpected issues within the SureView Camera stream such as a camera failing to stream any video or the camera stream starting but cutting out after a short time.

Milestone can GetConfig but not connect to live

It is possible to configure cameras in the Milestone software without an associated NAT address, because of this the situation can occur where the camera's hostname is local and therefore inaccessible from an external/different server. To resolve this you can set Sureview to connect to the cameras based on the server's ip address rather than the camera's hostname.

To invoke this setting add the following to the Authentication and Cameras field of the device:

UseCameraHost=false;

If you are running multiple Milestone servers you may need to open the web port (443 for HTTPs or 80 for HTTP) between these servers.

Live Cameras Not Working

Action 'DeviceConnect()' took too long

Check the systeminfo.xml file from the SureView Device Server(s)

http(s)://host:port/rcserver/systeminfo.xml

host = IP/DNS address of the milestone server

port = Port number used by milestone (443 for HTTPS, 80 for HTTP)

If the xml is taking longer to load than the device timeout it can cause a timeout error and the camera won't load. Download the file manually and add it to the Milestone Device folder on the SureView Device Server(s)

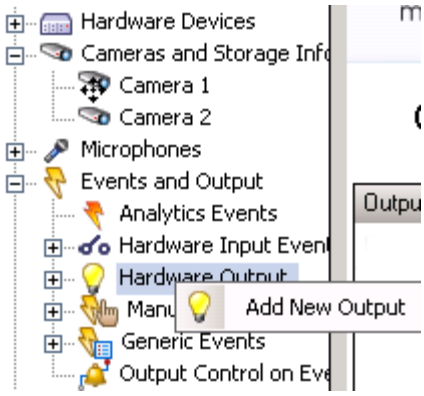
If the xml file doesn't load at all Sureview won't be able to connect to the cameras (see the "Before you begin" section) - This is a key prerequisite.

Milestone Enterprise and Professional Relays are not working correctly

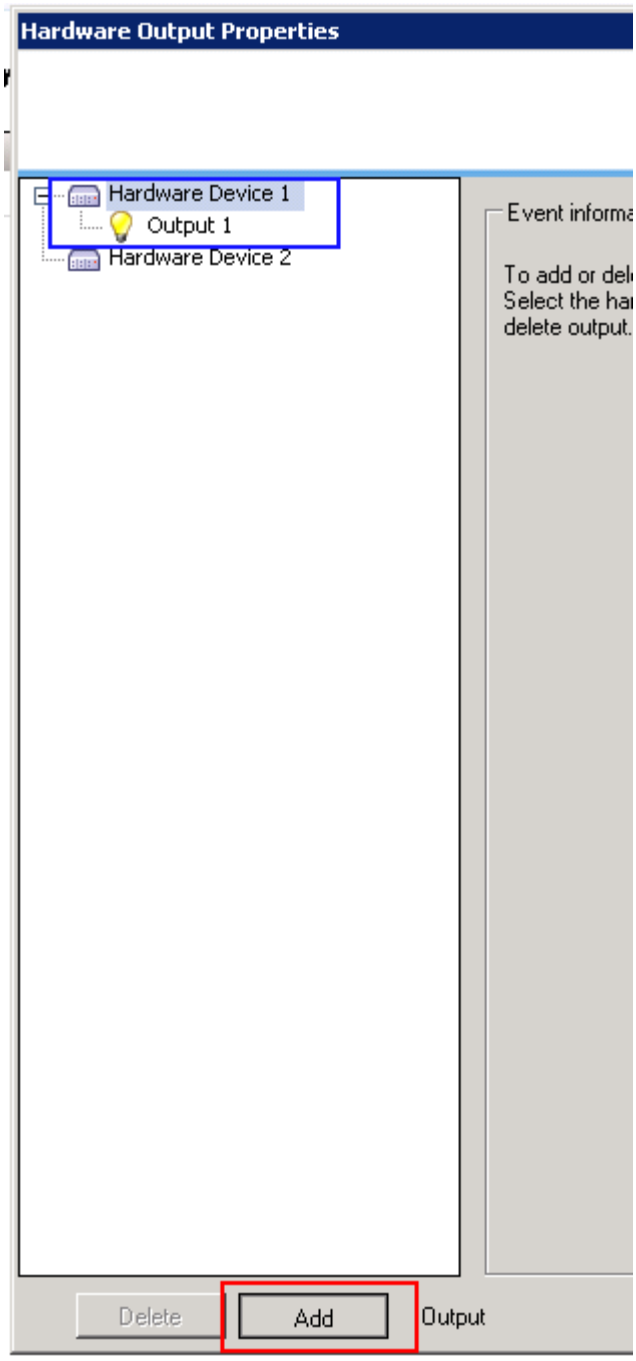
Outputs (relays) in the milestone software have to be referenced to the hardware device/camera they belong to. Ensuring the output refers to the correct camera can be done as follows:

With a hardware device added.

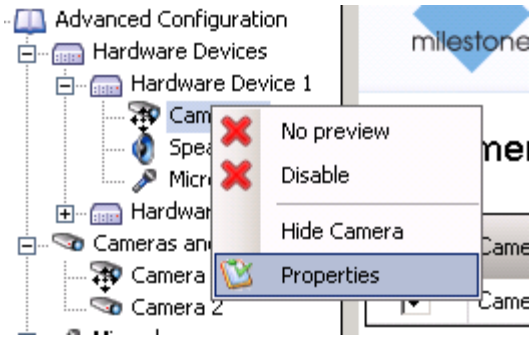
Right click hardware output (in events and output) and select add new output:



If your desired output is already in the list, ensure that it is under the correct device (highlighted in blue - This shows output 1 belongs to hardware device 1). If you require a new output, select the device you wish to use a output on and select Add (highlighted in red):



Right click the camera of the hardware device (in this example, hardware device 1) and select properties:



From the properties menu select Output. Ensure that the output is associated with the camera (Highlighted in blue). **Ensure that the output device is also contained in the manual activation section (highlighted in red).**