

VTrack

Milestone integration

basic steps

VTrack / Milestone Integration – Configuration steps

This integration allows Milestone to receive **events**, **events images** and informations (in the form of **metadata**) directly from VTrack.

It is possible to send **alarms** to any **XProtect** version, while the **metadata feature is supported only by the versions Corporate, Expert and Professional Plus**.

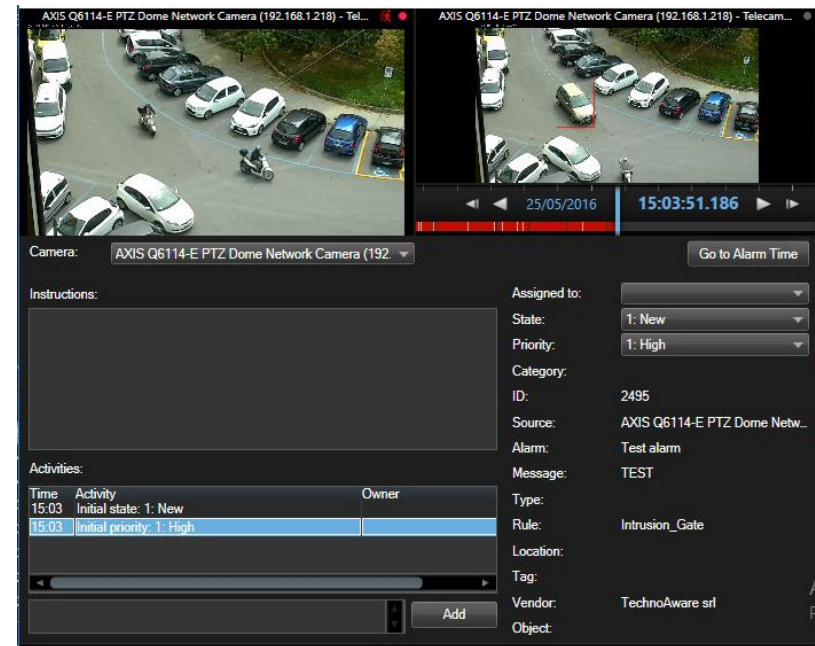
The basic steps are the following:

- VTrack:

- 1) Setup the plugins (*explained in other manuals*)
- 2) Setup the Milestone analytic events (events)
- 3) Setup the Milestone provider (metadata)


- Milestone:

- 4) Setup the alarm definitions (events)
- 5) Link the VTrack's metadata to the camera (metadata)



LOGIN THE CENTRAL MANAGER (VTrack)

VTrack / Milestone Integration – Login the Central Manager



The image shows a login dialog box for TechnoAware. At the top is the TechnoAware logo, a stylized blue 'S' shape. Below the logo is the text 'TECHNOAWARE' in a large, blue, serif font, followed by 'TECHNOLOGIES FOR AMBIENT INTELLIGENCE' in a smaller, blue, sans-serif font. The dialog box contains three input fields: 'Username' with a red border, 'Password' with an orange border, and 'Language' with a dropdown menu showing 'System default'. At the bottom right are 'OK' and 'Cancel' buttons.

Username:
admin

Password:
1234

CONNECT TO VTRACK

VTrack / Milestone Integration – Connect to VTrack

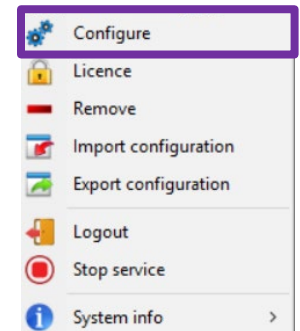
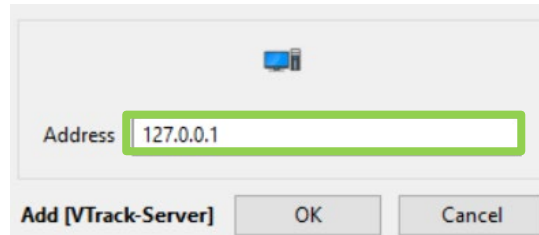
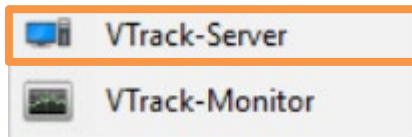
Press
«+»

Select
«VTrack-Server»

Select the ip of the
VTrack-Server to connect
and press «ok»

Click the
server's IP
address

Select
«configure»



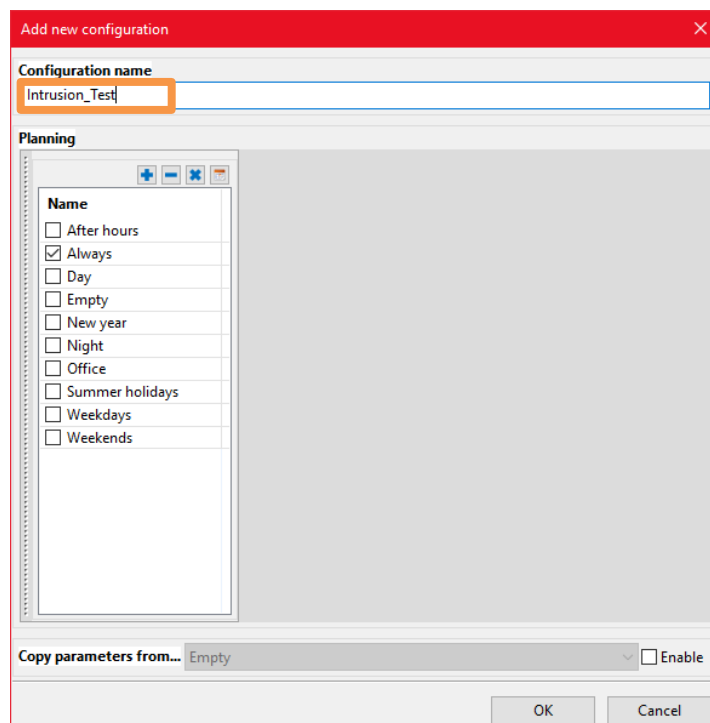
CREATE A NEW VTRACK'S CONFIGURATION

VTrack / Milestone Integration – Create a new VTrack's configuration

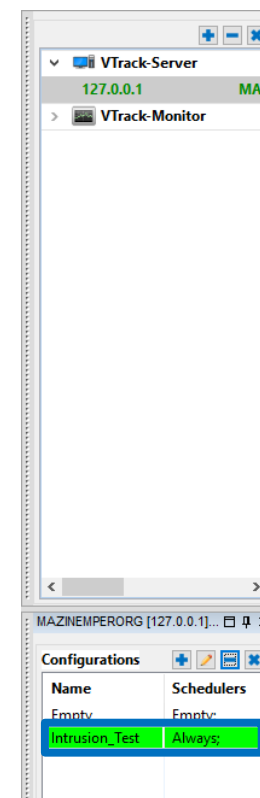
Press «+»



Fill the Configuration name field
Then press «ok»

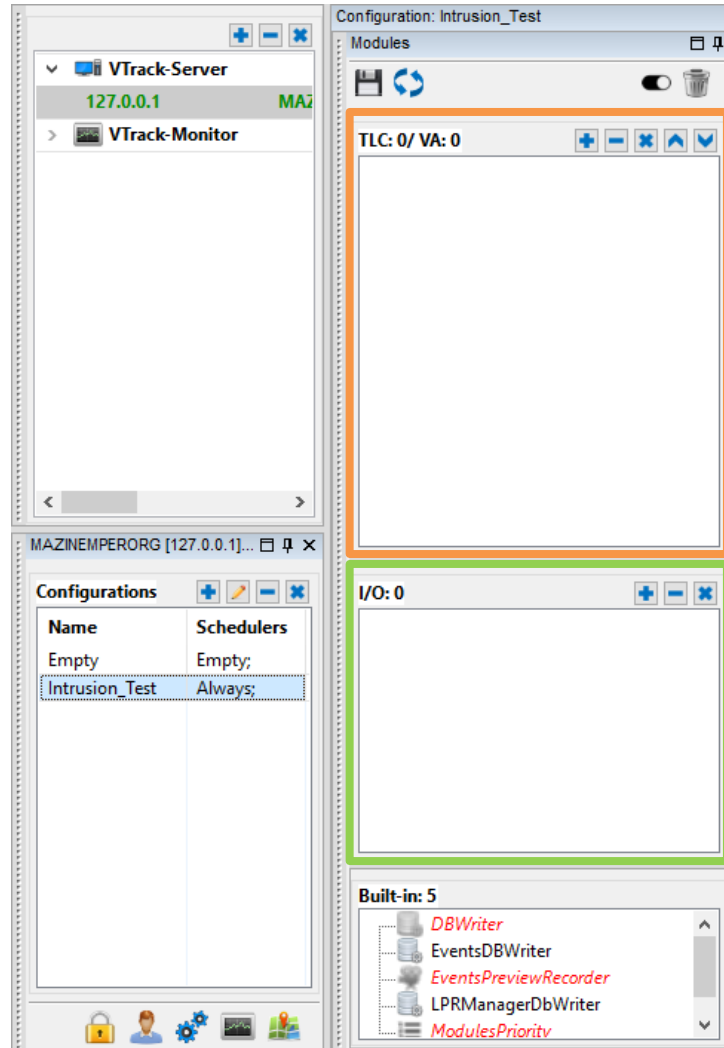
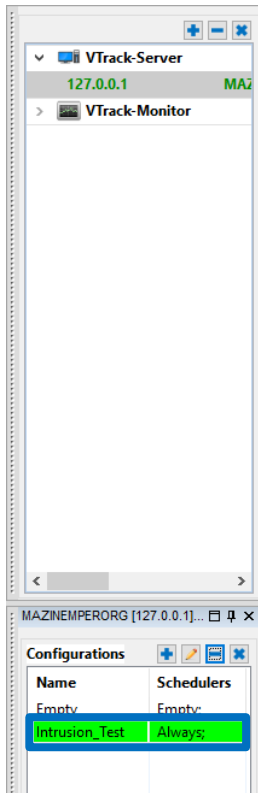


The new
configuration will
be created



VTrack / Milestone Integration – Create a new VTrack's configuration

Double click to enter in the configuration



Setup the acquisition and processing modules

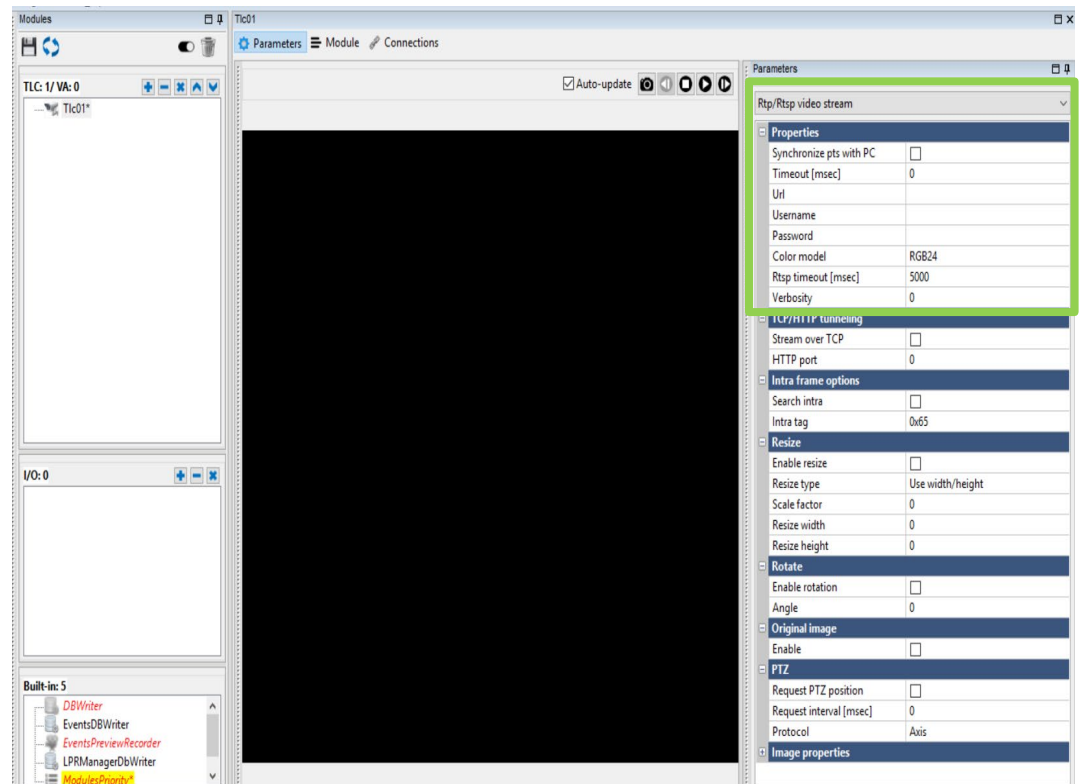
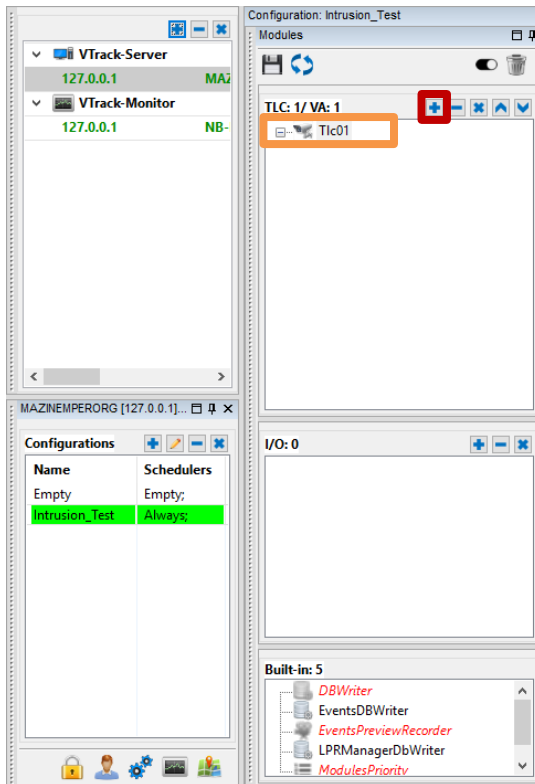
Setup the I/O modules

VTrack / Milestone Integration – Create a new VTrack's configuration

Click +» to add a camera

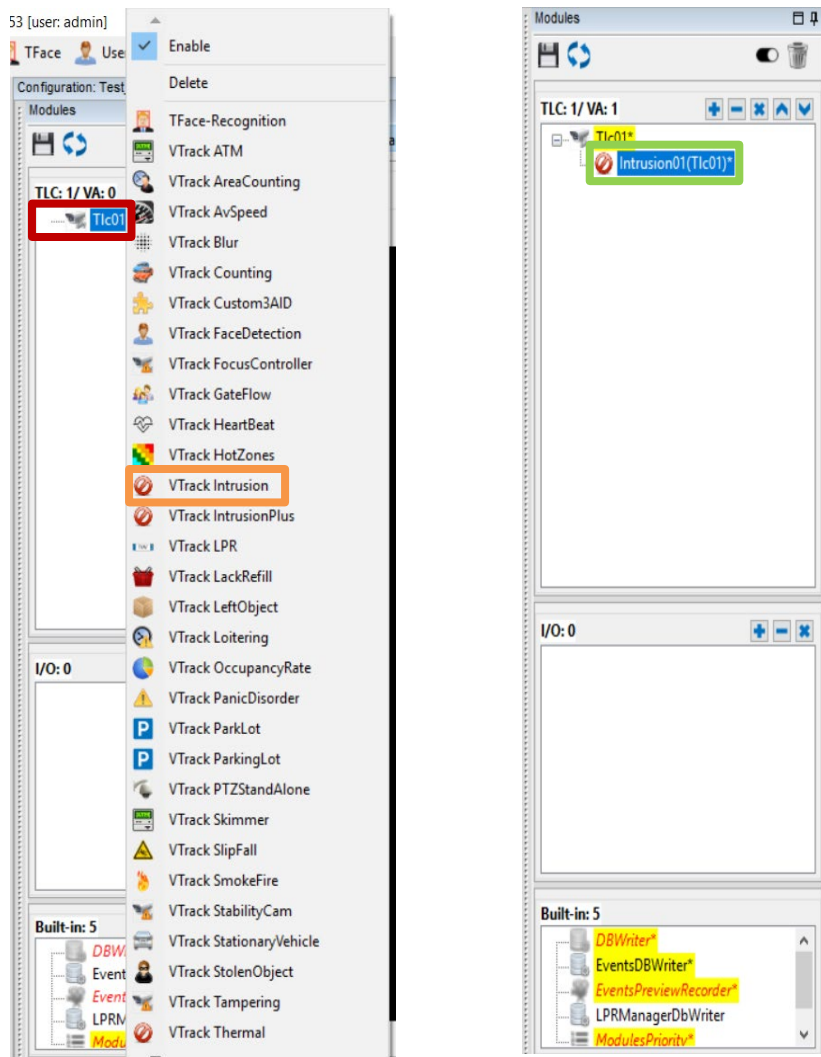
Double click to setup the acquisition module

Select RTSP and fill the acquisition's parameters



SETTING UP THE PROCESSING PLUGIN (VTrack)

VTrack / Milestone Integration – Setup the processing plugin

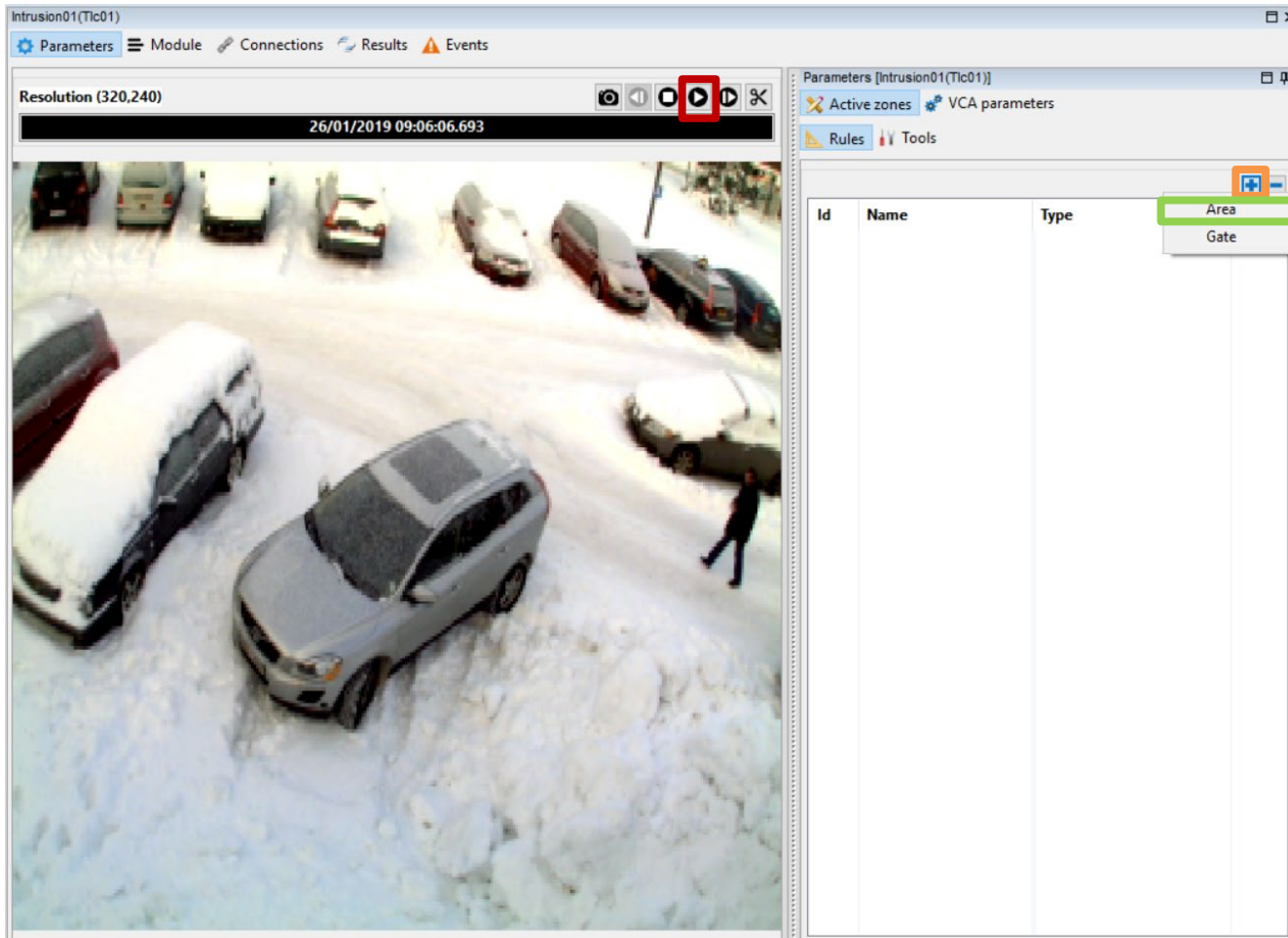


Right click on the camera to add a new processing module

Select the processing module

Double click on the processing module to setup

VTrack / Milestone Integration – Setup the processing plugin



Press «play» to see the camera

Click «+» to add a new alarm region

Select the type of alarm region

VTrack / Milestone Integration – Setup the processing plugin

The screenshot displays the VTrack software interface. The central window shows a camera feed of a snowy street with a red box around a car and yellow arrows indicating a gate. The right panel shows the configuration details for the 'Intrusion01(Tic01)' event, including a table of parameters.

Name	Gate
Id	1
Type	Intrusion_Gate
Colour	
Enable	<input checked="" type="checkbox"/>
Direction	IN
Trajectory size	2
Distance [pixels]	0
Draw	<input type="checkbox"/>

The 'Events' section shows the 'Start' event is 'Intrusion_Gate'. The 'Target features' section is empty.

Click on the image points to create the vertices of the alarm zone

Change the name of the event to trigger the alarm in milestone

Click «V» close the zone

Click the floppy icon to save the configuration

SETTING UP THE MILESTONE ANALYTIC EVENTS (VTrack)

VTrack / Milestone Integration – Milestone analytic events

The screenshot displays the TechnoAware Central Manager 5.0.169 interface. The top navigation bar includes 'Configurations', 'Overview', 'Live', 'Events', 'TFace', and 'User'. The main window is divided into several panes:

- Left Pane:** Shows a tree view with 'VTrack-Server' (IP: 127.0.0.1) and 'VTrack-Monitor'.
- Top Middle Pane:** 'Configuration: Intrusion_Test' with 'Modules' and 'TLC: 1/ VA: 1' sections.
- Bottom Left Pane:** 'Configurations' table with columns 'Name' and 'Schedulers'.
- Right Pane:** A list of modules for integration, with 'Milestone analytic events' highlighted in blue.

Name	Schedulers
Empty	Empty;
test_FaceDetec...	Night;
test_SlipFall	Always;

- Arteco Open Connector
- Avigilon POS sender
- Avigilon alarm sender
- Axis alarm sender
- Axis virtual input
- CWare notifier
- Events recorder
- FTP sender
- GateFlow aggregator
- Genetec provider
- Http requestor
- Image storage
- LPR notifier
- Logical rules
- Mail sender
- March Networks alarm sender
- Metadata XML notifier
- Milestone analytic events**
- Milestone provider
- Mirasys event
- Mirasys metadata notifier
- Modbus sender

Press «+» to open the list of I/O Interfaces

Select «Milestone Analytic events»

VTrack / Milestone Integration – Milestone analytic events

The screenshot displays the VTrack software interface. On the left, there are three panels: 'Modules' showing 'Tlc01*' with 'Intrusion01(Tlc01)*', 'I/O: 1' showing 'Milestone analytic events*', and 'Built-in: 5' listing 'DBWriter*', 'EventsDBWriter*', 'EventsPreviewRecorder*', 'LPRManagerDbWriter', and 'ModulesPriority*'. The main window is titled 'Milestone analytic events' and has three tabs: 'Parameters', 'Module', and 'Connections'. The 'Connections' tab is highlighted with a red box. Below the tabs, there are two tables: 'Inputs modules' and 'Outputs modules'. The 'Inputs modules' table has a blue border and contains one entry: 'Intrusion01(Tlc01)' with 'Module uuid' '2f42966e-daa4-4e24-a336-e46d936bed4b'. The 'Outputs modules' table is empty. Two red boxes with white text are overlaid on the right side of the interface. The top one says 'Open the «Connections» tab' and the bottom one says 'Check the plugins of the alarms to send'.

Open the «Connections» tab

Check the plugins of the alarms to send

VTrack / Milestone Integration – Milestone analytic events

The screenshot shows the 'Milestone analytic events' configuration window. The 'Parameters' tab is active, showing two configuration sections:

- Milestone event server:** IP address: 192.168.1.126, Port: 9090, Unsent queue [max dimension]: 20, Message format: ANALYTIC_EVENT.
- Milestone management server:** IP address: 192.168.1.126, Port: 80, Product type: Corporate family, Authentication: Windows Authentication, Username: MAZINEMPERORG\Federico, Password: *****.

Below these sections is a 'Rule list' table:

Id	Event type	Name	Type	Module name	Camera name
<input type="checkbox"/> 1	Start	Intrusion_Gate_Start	Intrusion_Gate	Intrusion01(T1c01)	

A 'Test' button is located at the bottom right of the configuration window.

Open the
«Parameters» tab

Fill the IP address and
credentials of the
Milestone
management server

Fill the IP address and
credentials of the
Milestone event server
(usually the same)

VTrack / Milestone Integration – Milestone analytic events

Flag the checkbox of the alarms to be sent to Milestone

Double click the «Camera name» cell

Check the name of the event (it have to be the same as the relative Milestone's analytic event

Select the camera from the list to complete the association

The screenshot displays the 'Milestone analytic events' configuration window. It is divided into several sections:

- Parameters:** Includes 'Module' and 'Connections' tabs.
- Milestone event server:** A table with the following data:

IP address	192.168.1.126
Port	9090
Unsent queue [max dimension]	20
Message format	ANALYTIC_EVENT
- Milestone management server:** A table with the following data:

IP address	192.168.1.126
Port	80
Product type	Corporate family
Authentication	Windows Authentication
Username	MAZINEMPERERORG\Federico
Password	*****
- Rule list:** A table with columns: Id, Event type, Name, Type, Module name, Camera name. The first row is selected, with a checkbox in the 'Id' column checked and the 'Camera name' cell double-clicked.

Id	Event type	Name	Type	Module name	Camera name
<input checked="" type="checkbox"/>	Start	Intrusion_Gate	Intrusion_Gate	Intrusion01(TIc01)	AXIS Q6114-E ...
- Rule details:** Shows 'Name' as 'Intrusion_Gate'.
- Camera association:** A table with columns: Name, Server. It lists 'AXIS Q6114-E PTZ Dome Network Camera (192.1...)' associated with 'MAZI'.

An orange arrow points to the 'Name' column in the 'Rule list' table with the text: "This column shows the name of the analytic event."

SETTING UP THE MILESTONE PROVIDER (VTrack)

VTrack / Milestone Integration – Milestone provider

TechnoAware Central Manager 5.0.169 [user: admin]

Configurations Overview Live Events TFace User

Configuration: test_SlipFall

Modules

TLC: 1/ VA: 1

Tlc01

I/O: 0

Milestone analytic events

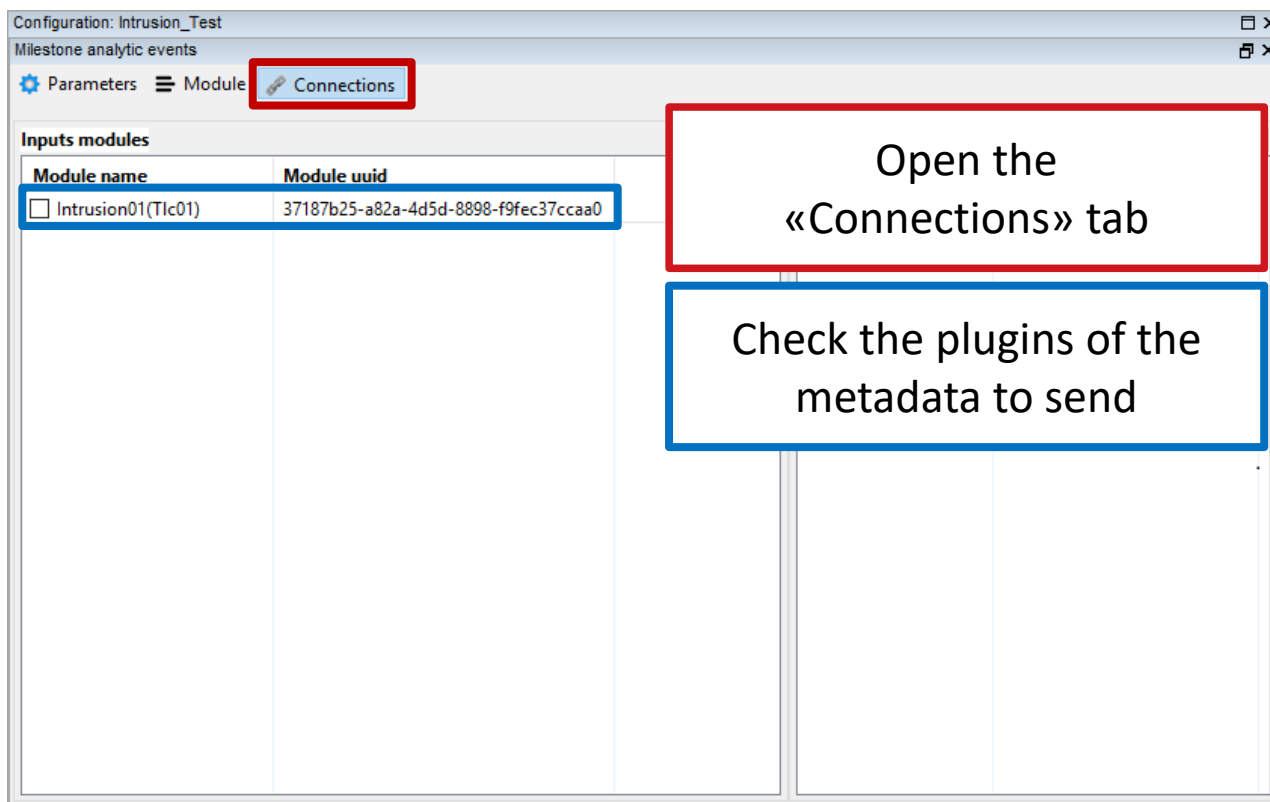
Milestone provider

- Arteco Open Connector
- Avigilon POS sender
- Avigilon alarm sender
- Axis alarm sender
- Axis virtual input
- CWare notifier
- Events recorder
- FTP sender
- GateFlow aggregator
- Genetec provider
- Http requestor
- Image storage
- LPR notifier
- Logical rules
- Mail sender
- March Networks alarm sender
- Metadata XML notifier
- Milestone analytic events
- Milestone provider
- Mirasys event
- Mirasys metadata notifier
- Modbus sender
- Modules activator

Press «+» to open the list of I/O Interfaces

Select «Milestone provider»

VTrack / Milestone Integration – Milestone provider



Configuration: Intrusion_Test

Milestone analytic events

Parameters Module **Connections**

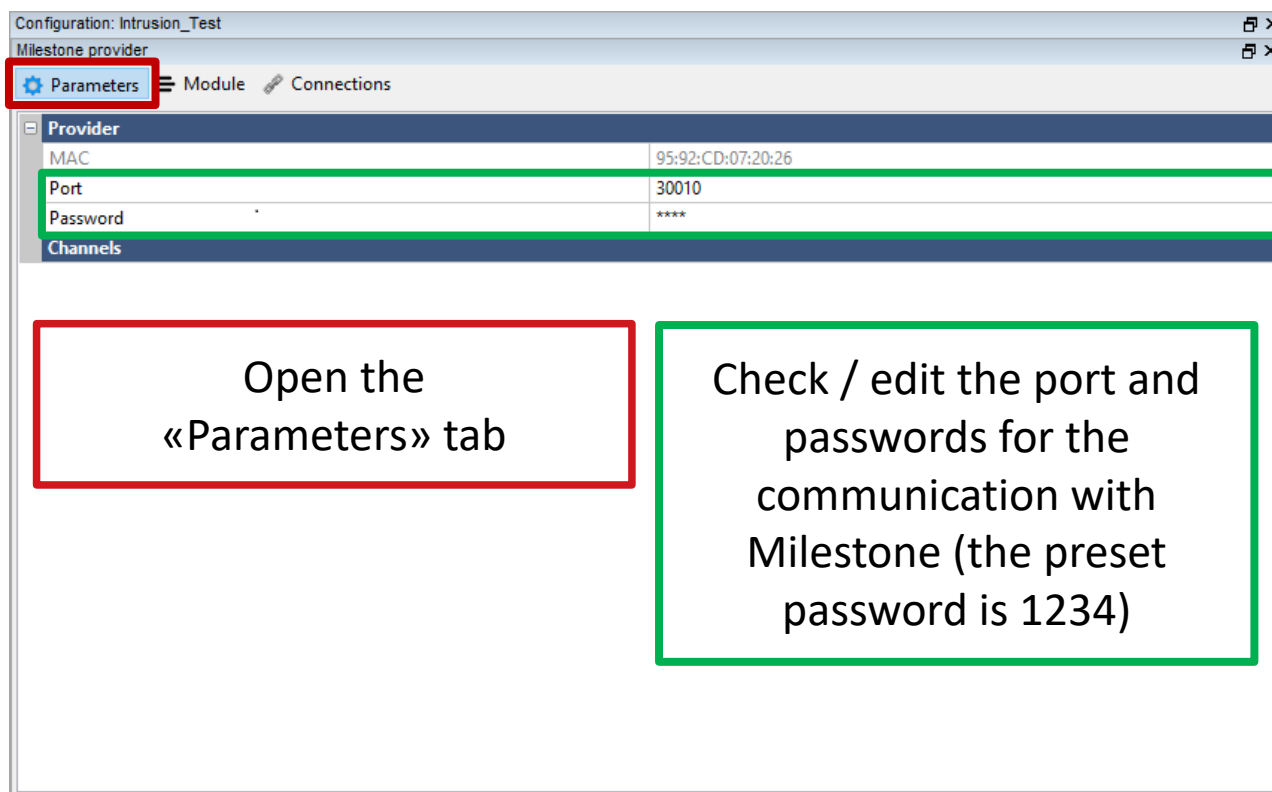
Inputs modules

Module name	Module uuid
<input type="checkbox"/> Intrusion01(Tlc01)	37187b25-a82a-4d5d-8898-f9fec37ccea0

Open the «Connections» tab

Check the plugins of the metadata to send

VTrack / Milestone Integration – Milestone provider



Configuration: Intrusion_Test

Milestone provider

Parameters Module Connections

Provider	
MAC	95:92:CD:07:20:26
Port	30010
Password	****
Channels	

Open the «Parameters» tab

Check / edit the port and passwords for the communication with Milestone (the preset password is 1234)

Remember: every Milestone provider needs to have a different port.

VTrack / Milestone Integration – Milestone provider

The screenshot displays the VTrack software interface with the 'Parameters' window open for the 'Intrusion01(Tic01)' module. The interface is divided into several panes:

- Modules:** Shows 'Tic01*' and 'Intrusion01(Tic01)*'.
- I/O:** Shows 'Milestone analytic events*'. Below it, a 'Built-in: 5' section lists modules like DBWriter, EventsDBWriter, EventsPreviewRecorder, LPRManagerDbWriter, and ModulesPriority.
- Parameters [Intrusion01(Tic01)]:** The main configuration pane. It includes:
 - Active zones:** A red box highlights 'VCA parameters'.
 - Drawing and tools:** Includes checkboxes for 'Allowed size', 'Dilation', 'Horizon line', and 'Erosion'.
 - Advanced:** A tree view with sections for 'Foreground', 'Background', 'Middle level filtering', 'Shadows', 'Pre-filtering', 'Gamma filtering', 'Alarm references', and 'Onvif video analytics'.
 - Onvif video analytics:** A blue box highlights the 'Enable' checkbox, which is checked.
 - Objects:** A green box highlights a table with the following data:

Line thick	3
Line color	#FF00FF00
Fill color	#00FF0000
 - Alarms:** A table with the following data:

Line thick	5
Line color	#FFFFFF00
Fill color	#80FF0000
 - PTZ:** Includes 'Repeated target notification to PTZ' and 'Forensic data'.
 - Enable:** A note stating 'If enabled, the module adds the meatdata XML to its output.'

Go to the plugin and open the «VCA Parameters»

Check «Enable» under the «Onvif video analytics»

Set the color, filling and line thickness of the tracked objects when they trigger an alarm or else

SETTING UP THE ALARM DEFINITIONS (Milestone)

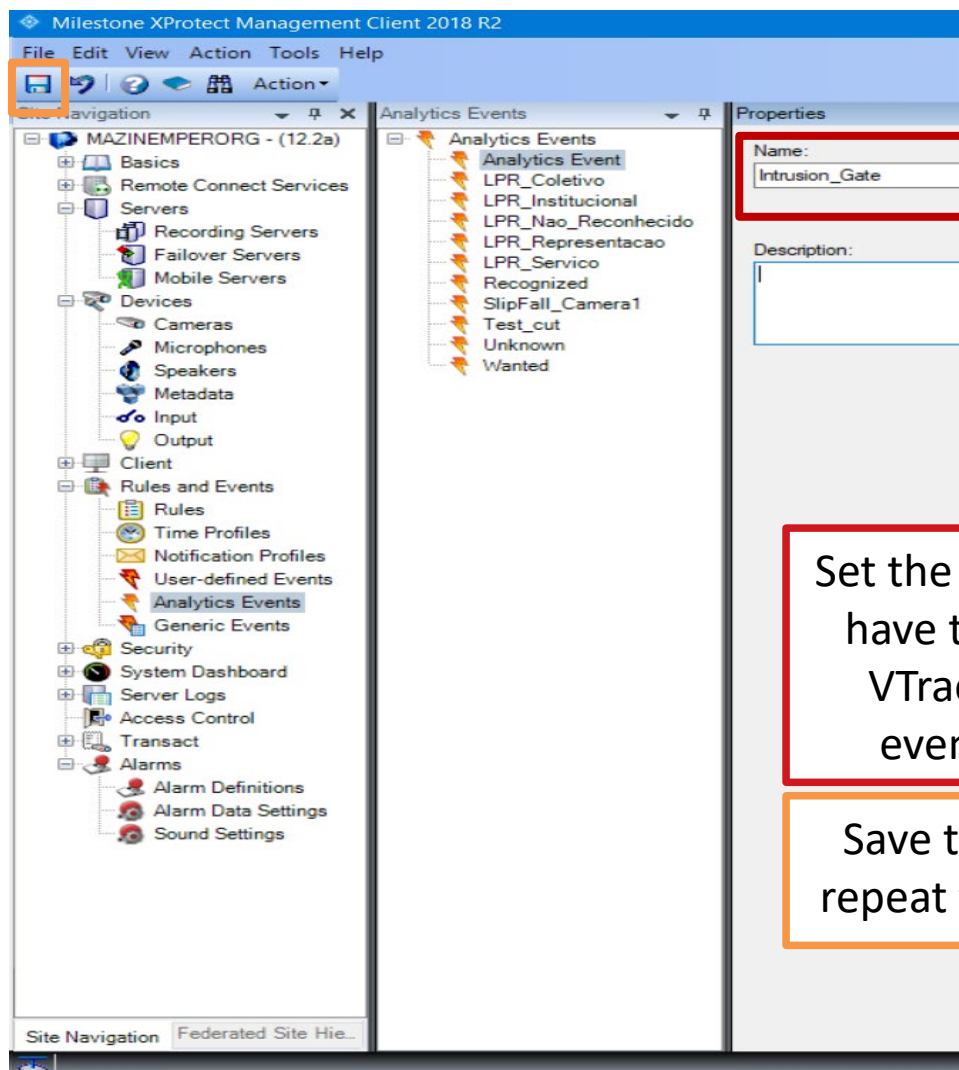
VTrack / Milestone Integration – Milestone alarm definitions

The screenshot displays the Milestone XProtect Management Client 2018 R2 interface. The 'Site Navigation' pane on the left shows a tree structure with 'Analytics Events' highlighted under 'User-defined Events'. The main pane shows the 'Analytics Events' tree with a context menu open over the 'Analytics Events' node. The context menu options are: Collapse, Add New ... (CTRL+N), and Refresh (F5). The 'Add New ...' option is highlighted with an orange box. The 'Properties' pane on the right shows a 'Description:' field.

Under the «Rules and Events» tree, open the «Analytics Events» tab

Right click on the Analytics Events main tree and select «Add New ...»

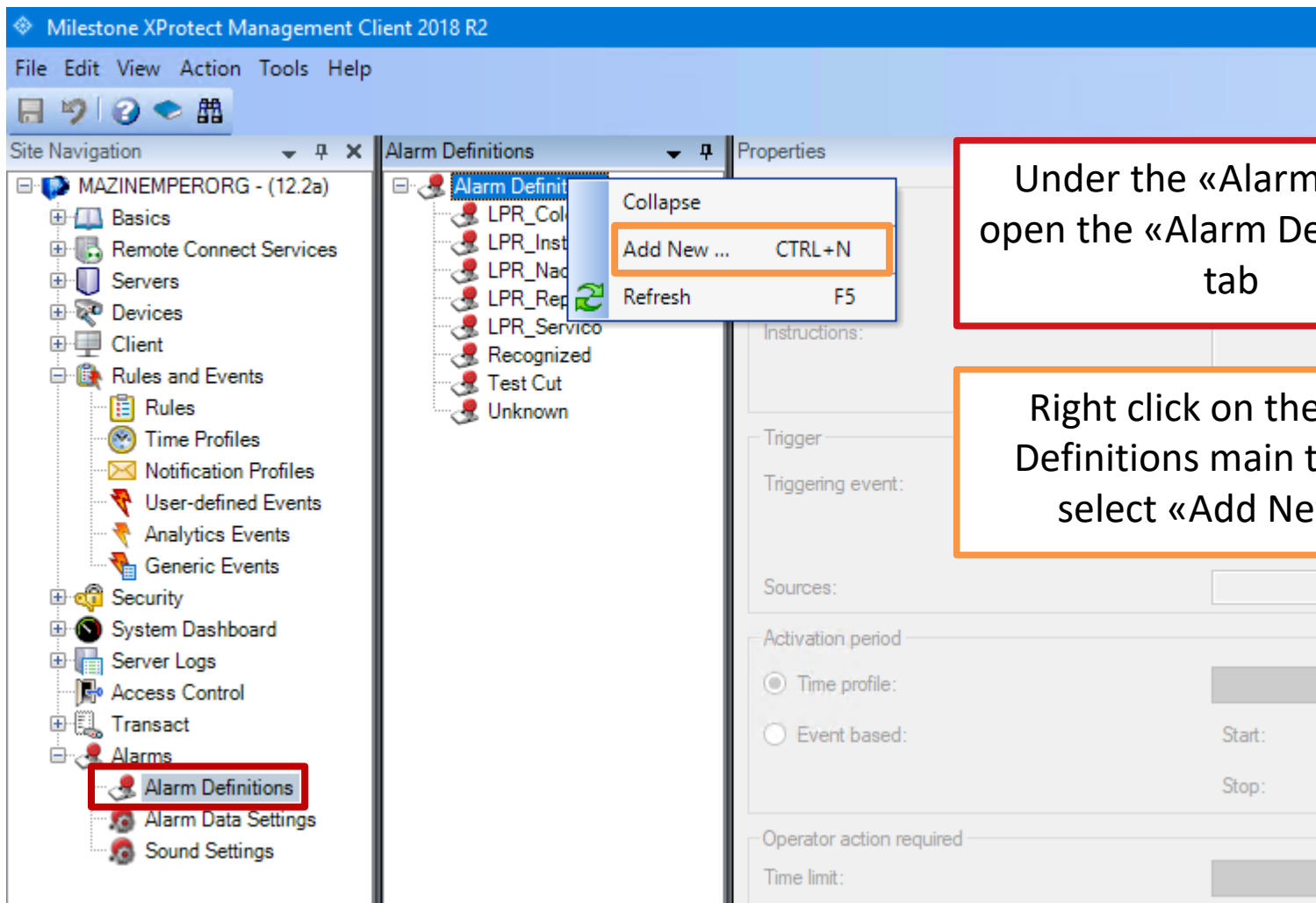
VTrack / Milestone Integration – Milestone alarm definitions



Set the name of the events (that have to be the same as in the VTrack's Milestone analytic events interface – page 7)

Save the applied changes and repeat the steps for every event

VTrack / Milestone Integration – Milestone alarm definitions



Under the «Alarms» tree, open the «Alarm Definitions» tab

Right click on the Alarm Definitions main tree and select «Add New ...»

VTrack / Milestone Integration – Milestone alarm definitions

Alarm Definitions

Alarm Definition

LPR_Coletivo

LPR_Institucional

LPR_Nao_Reconhecido

LPR_Representacao

LPR_Servico

Recognized

Test Cut

TFaceAlarm

Unknown

Properties

Alarm definition

Enable:

Name: Test alarm

Instructions:

Trigger

Triggering event: Analytics Events

Intrusion_Gate

Sources: AXIS Q6114-E PTZ Dome Network Camera (192.168.1.218) - Telecamera 1

Activation period

Time profile: Always

Event based: Start: Stop:

Operator action required

Time limit: 1 minute

Events triggered:

Other

Related cameras:

Related map:

Initial alarm owner:

Initial alarm priority: High

Alarm category:

Events triggered by alarm:

Auto-close alarm:

Set the name of the alarm definition

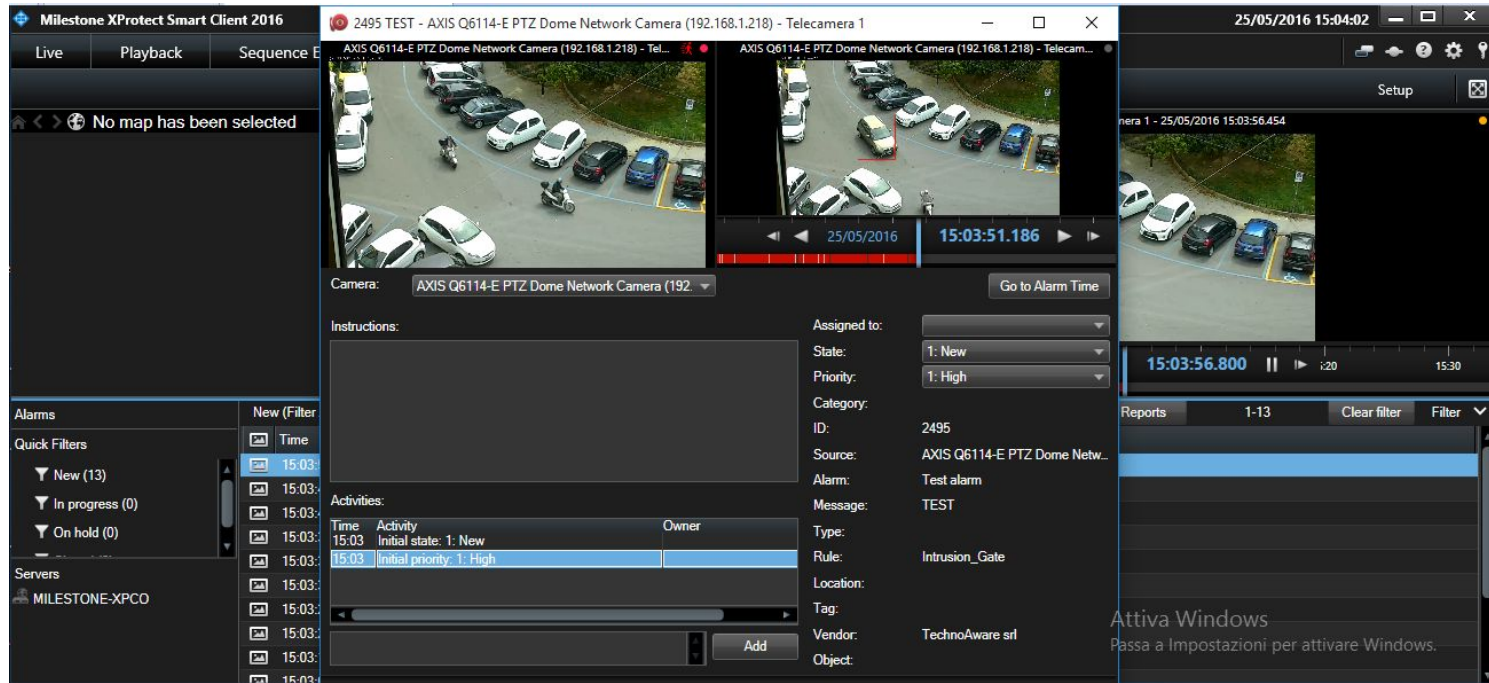
Select «Analytic Events» from the drop down list

Select the previously set analytic event from the drop down list

Press «select» and set the camera associated to the event

Save the applied changes and repeat the steps for every event

VTrack / Milestone Integration – Milestone alarms, result



Restart the XProtect Smart Client (if open) and, if everything is correctly set, the system will now show the VTrack events associated to the camera directly in XProtect.

SETTING UP THE MIP DRIVER (Milestone)

VTrack / Milestone Integration – MIP driver

The screenshot displays the Milestone XProtect Management Client 2018 R2 interface. The 'Site Navigation' tree on the left shows the 'Recording Servers' folder highlighted with a red box. The main pane shows the 'Recording Servers' tree with 'MAZINEMPERO' selected, and a context menu is open over it. The 'Add Hardware...' option is highlighted with an orange box. The Properties pane on the right shows the configuration for the selected server.

Recording Servers

- Recording Servers
 - MAZINEMPERO
 - AXIS Q6114

Context Menu:

- Collapse
- Add Hardware... CTRL+N
- Move Hardware...
- Delete All Hardware
- Rename Recording Server F2
- Remove Recording Server
- Refresh F5

Properties:

- mazinEmperorG
- Local web server address: http://mazinemperorg:7563/
- Web server address:
- Time zone: (UTC+01:00) Amsterdam, Berlino, Berna, Roma, Stoccolma,
- Platform: 64-bit

Under the «Servers» tree, open the «Recording Servers» tab

Right click on the Recording Servers main tree and select «Add Hardware...»

VTrack / Milestone Integration – MIP driver

Add Hardware

This wizard helps you detect and set up hardware.

Hardware detection method:

- Express (recommended)
Automatically detects hardware on the recording server's local network
- Address range scanning
Scans defined network address ranges and detects hardware models
- Manual**
Detects hardware models for manually entered IP addresses and host names
- Remote connect hardware
Add hardware connected via a remote connect server

milestone
The Open Platform Company

Help < Back **Next >** Cancel

Select «**Manual**» then press «**Next**»

VTrack / Milestone Integration – MIP driver

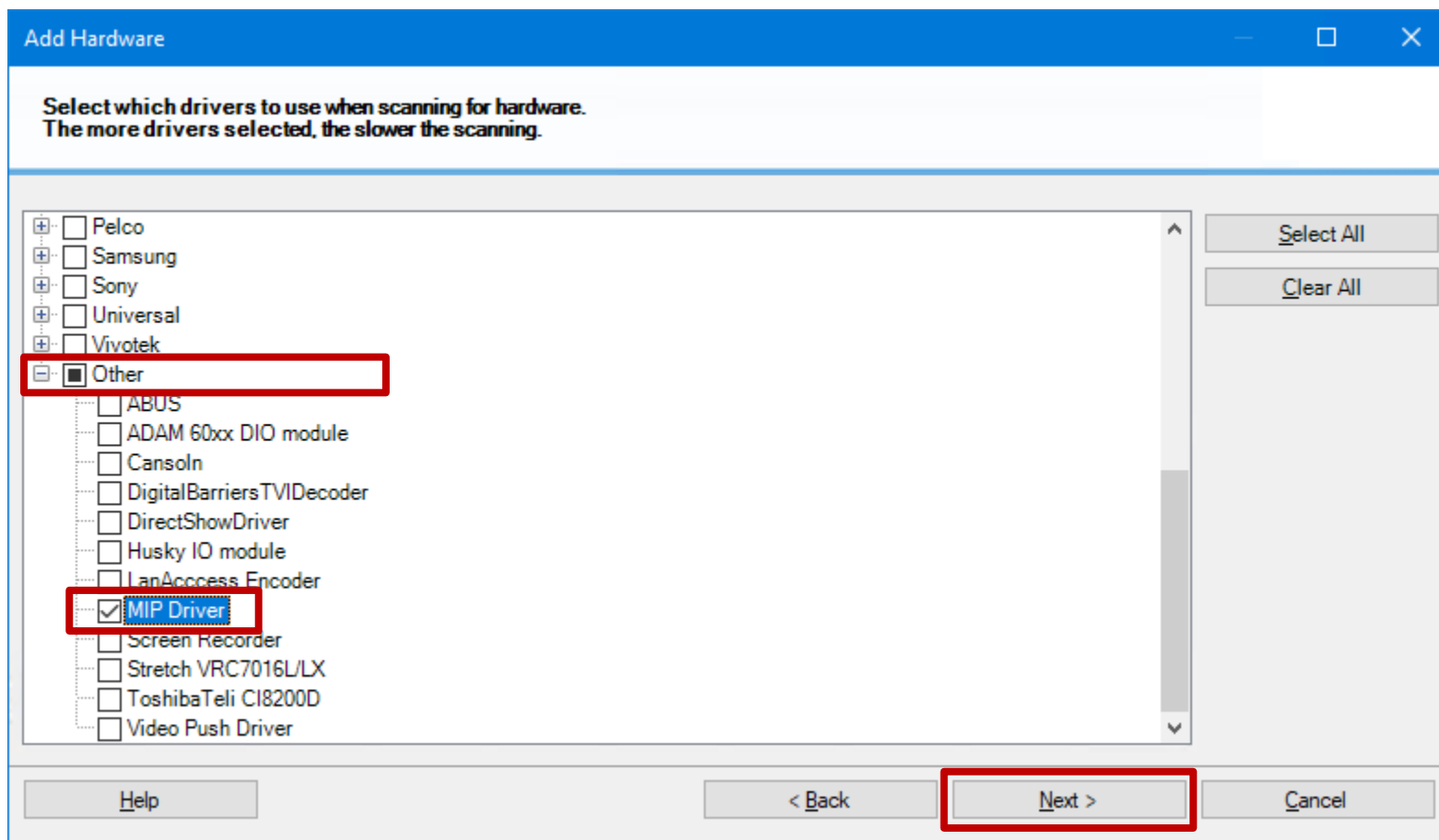
Add Hardware

Specify user name and password if devices are not using the default ones.

Include	User Name	Password
<input type="checkbox"/>	(Factory Default)	••••••••
<input type="checkbox"/>	root	••••••••
<input checked="" type="checkbox"/>		••••••••

Press «Add», leave the User Name empty and set the defined password (page 11).
Press «Next»

VTrack / Milestone Integration – MIP driver



In the hardware list, expand the «Other» main tree and check «MIP Driver». Press «Next».

VTrack / Milestone Integration – MIP driver

Add Hardware

Enter information for hardware you want to add.
Optionally, select driver type to speed up detection.

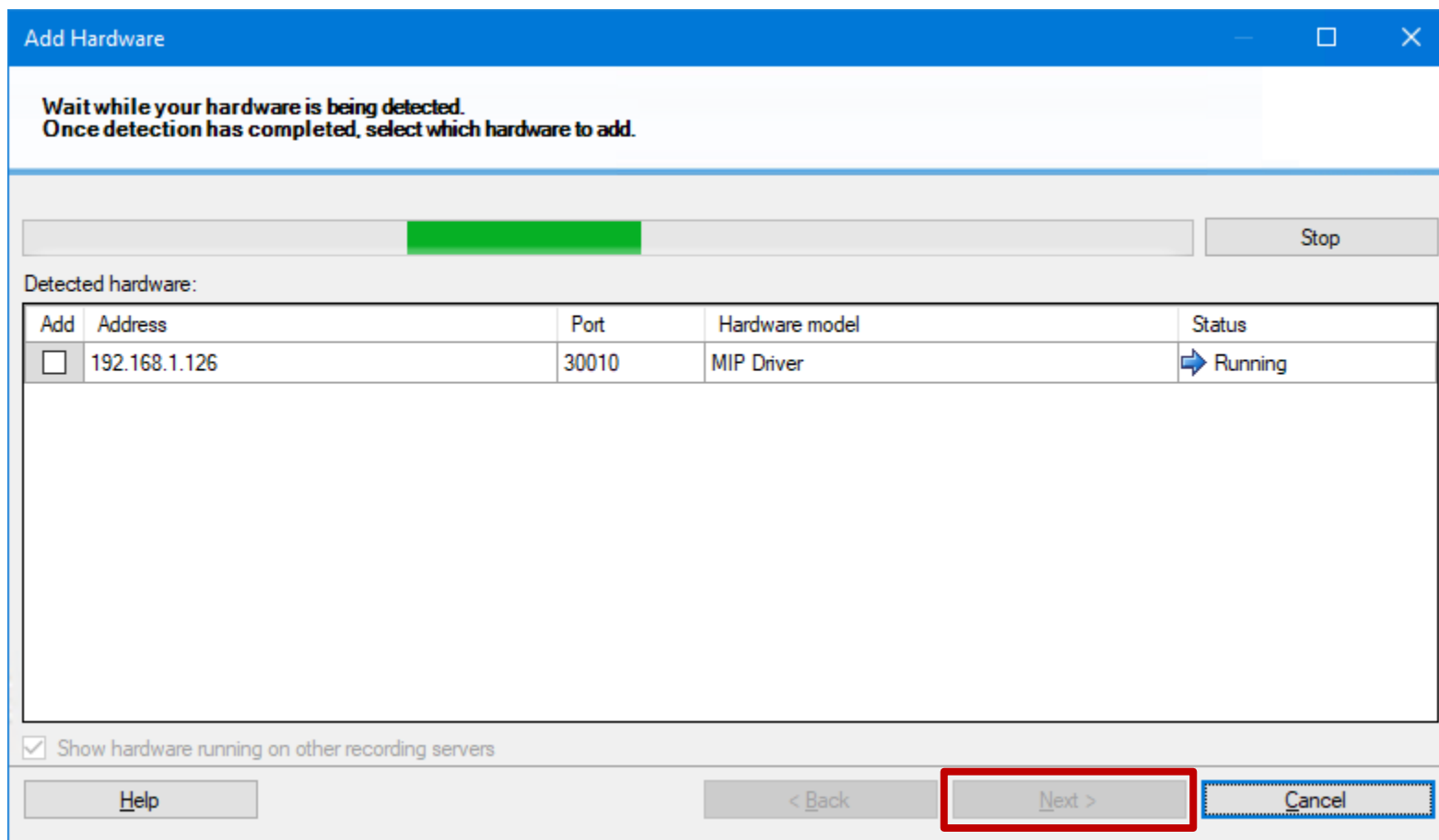
Address	Port	Hardware model
127.0.0.1	30010	MIP Driver

***Remember:** every Milestone provider needs to have a different port.*

Buttons: Add, Remove, Help, < Back, Next >, Cancel

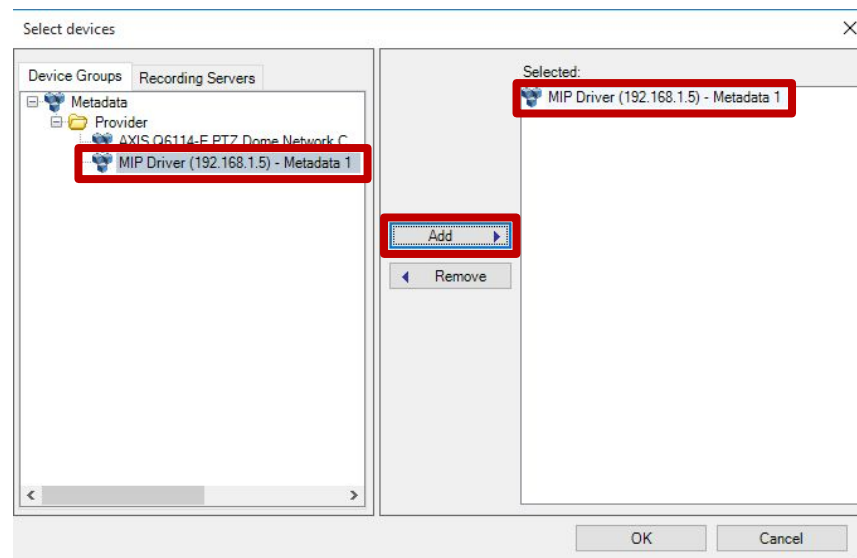
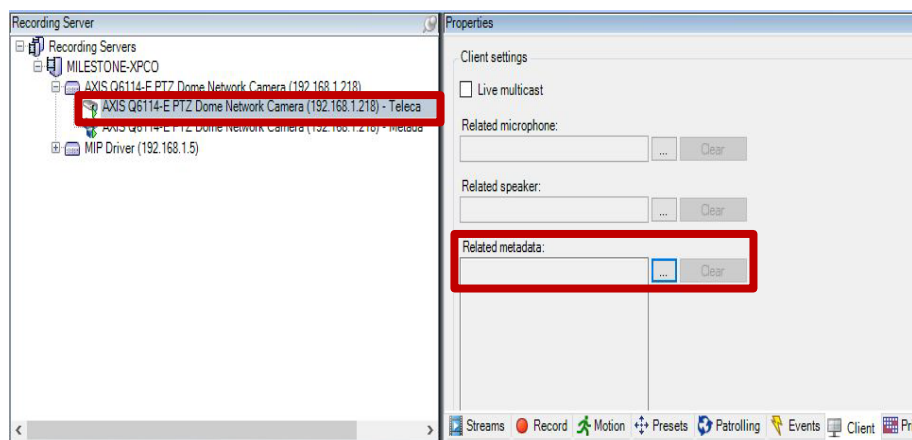
Set the IP Address of the VTrack Server and the port of the VTrack's Milestone provider (page 11).
Press «**Next**».

VTrack / Milestone Integration – MIP driver



Milestone will check the configuration.
If correct press «**Next**», else press «**Back**» and apply the required changes.

VTrack / Milestone Integration – MIP driver

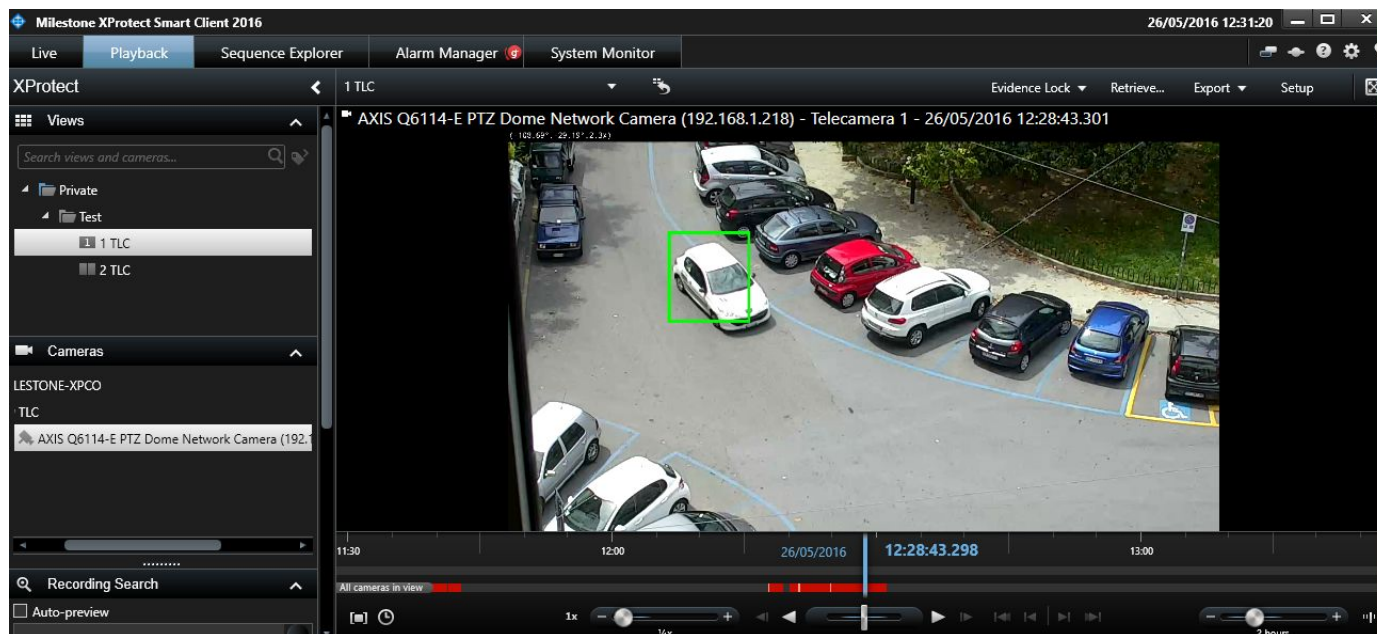


Under the «Recording Servers» tree, double click on the camera associated to the Metadata.

Click on «...» right next to the Related metadata and add the previously added MIP Driver.

Press OK and save.

VTrack / Milestone Integration – MIP driver, results



Restart the XProtect Smart Client (if open) and, if everything is correctly set, the system will now highlight automatically the bounding boxes using the color scheme set on VTrack.