



Herta – Milestone Plugin integration

**User Guide
v1.3.0.30**

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Introduction

The receiving of detection and identification alarms can be extremely useful when securing any physical facility. Thinking of this, Herta Security offers to Milestone's users a solution which integrates both platforms. Herta Integration with Milestone allows an alarm sent from one of Herta's products to be sent to the Milestone's solutions. Its main characteristics are:

- It uses a network to connect to Herta software to the Milestone server to receive the alarms sent from the Herta applications in operation and send them to the **Milestone XProtect Smart Client (64bits)**, respectively.
- It permits multi-tasking, which means that Herta Integration with Milestone can be activated on a secondary level, where it will continue working uninterruptedly and efficiently.
- The plugin sends Analytic Events to the Milestone XProtect. These events can be later used to trigger certain functionalities inside the XProtect software.
- If various alarms are sent at the same time, Herta plugin with Milestone captures all of them, without losing any information.

Herta Integration with Milestone is the ideal application for maintaining the alarm reception center to the users of Milestone's products, specially the identification alarms.

Integration features

- Herta-Milestone Integration Plugin (MIP) is an integration between Herta and Milestone XProtect VMS.
- The integration receives detection and/or identification alarms from Herta and creates events and/or alarms in Milestone event handler.
- Herta MIP configuration on Milestone XProtect Management Client (server, analytic event messages, Herta and database information, camera mapping).
- It allows you to receive the Herta facial recognition alarms in the type of alarms and/or events.
- XProtect Smart Client setup in order to visualize alarms/events coming from Herta.
- Alarm Manager tab to visualize alarms information containing timestamp, subject information (ID, name, surname, code, group, comments), score, source, video recording, detected face image, subject profile and subject candidates.
- Herta subjects tab to visualize enrolled subjects in Herta.
- Herta settings tab to change some Herta thresholds and identify a person by uploading a photo.
- This integration plug-in is compatible with BioAccess, BioMaster, BioSurveillance and BioSurveillance NEXT.

Integration requirements

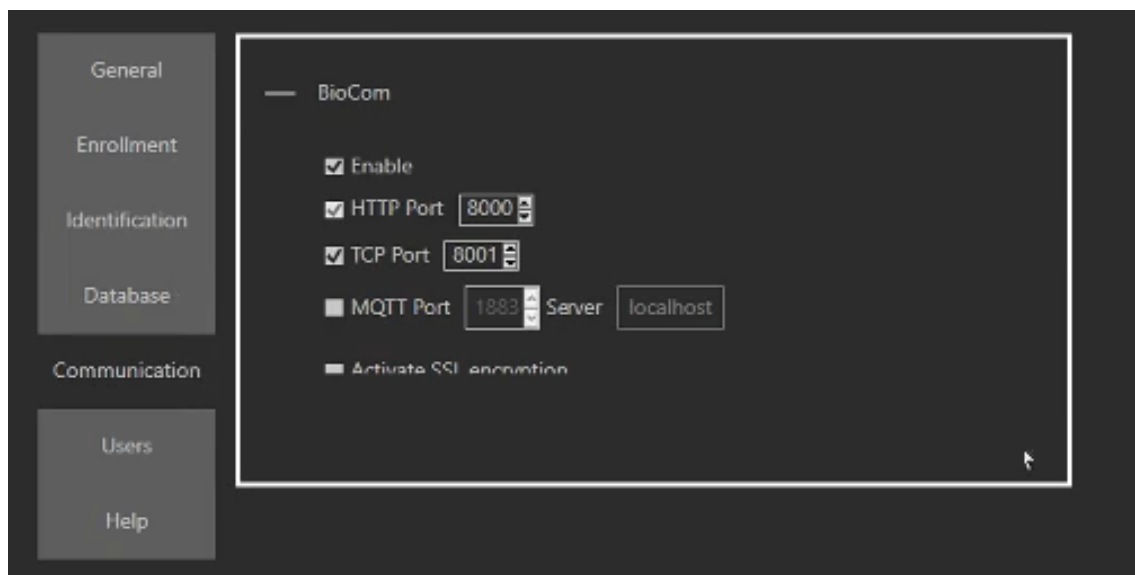
- The integration was developed with Milestone XProtect Corporate 2019R3 and verify it with XProtect Corporate 2018R3, 2019R3, 2020R1, 2020R3 and 2022R1. However, it should be compatible with previous versions. It should be also compatible with XProtect Expert, XProtect Professional+ and XProtect Express+, but it was not validated with them.
- Herta v3.2.10 or later. Herta MIP integration cannot run with previous versions of Herta.

Herta configuration

Before using Herta Integration with Milestone for the first time, it needs to be installed in the computer where the application is going to be used. The folder containing the application can be copied to any local folder of the computer.

It is not necessary to install it in the same computer where the Milestone XProtect server is running, but the computer where it will be installed needs to access the Milestone XProtect Management Client server through a network connection. This property is also valid for BioSurveillance clients.

In order to connect to BioSurveillance, you should have the BioCom services enabled. You can enable it by going to Settings > Communication.



Integration configuration

Plugin installation

Herta MIP is a bundle of files, no one is an executable file. This bundle must be installed in MIPPlugin folder in order Milestone software can recognise it. Please see below the full path:

```
C:\Program Files\Milestone\MIPPlugins\Herta
```

After installing the plugin, it is required to restart the Milestone XProtect Event Server in order it can load the new plugin.

Verify Plugin installation

The Herta MIP is loaded in three process of Milestone:

Milestone XProtect Smart Client:

1. Open Millstone XProtect Smart Client.
2. Click on information icon located on top-right part.
3. Select About.
4. In plug-in(s) list table show appear Herta Security plugin. In case it does not appear, XProtect Smart Client is not loading Herta MIP.

Milestone XProtect Management Client:

1. Open XProtect Management Client.
2. Go to Help on top bar.
3. Select About.
4. In plug-in(s) list table show appear Herta Security plugin. In case it does not appear, XProtect Management Client is not loading Herta MIP.

Milestone XProtect Event Server:

1. Go to taskbar (right-bottom side) and context-menu on Milestone XProtect Event Server.
2. Select "Show MIP log"
3. Check the Herta MIP is loaded.

```
Info PluginLoader Herta Security, loaded from:C:\Program  
Files\Milestone\MIPPlugins\Herta\FacialRecognitionMIP.dll
```

In case it does not appear, Management Event Server is not loading Herta MIP.

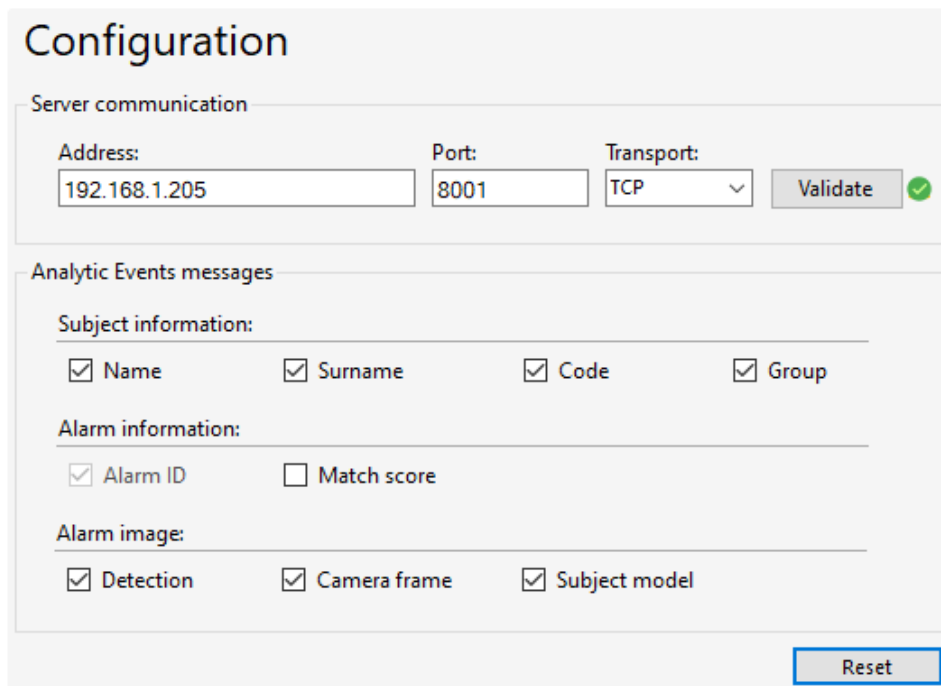
Milestone configuration

In this section we overview how to setup Herta MIP using XProtect Management Client. It is very important the plugin must be installed before start the configuration.

Server communication


First of all, we start with the configuration of the server communication.

1. Open Milestone XProtect Management Client and log in.
2. Go to the plug-in (it's in the bottom of Site Navigation panel) and expand "Herta Security" and then "Configuration".
3. Set server address, port and transport and then click "Validate", if everything is working properly the resulting screen should look like the below. Otherwise, it is necessary to check the BioCom connection or firewall between the Milestone XProtect and Herta servers.



Configuration

Server communication

Address: 192.168.1.205 Port: 8001 Transport: TCP Validate 

Analytic Events messages

Subject information:

☒ Name ☒ Surname ☒ Code ☒ Group

Alarm information:

☒ Alarm ID ☐ Match score

Alarm image:

☒ Detection ☒ Camera frame ☒ Subject model

Reset

Plug-in can be setup with TCP and HTTP transport protocol. Please use TCP for Herta or BioMaster single database. Whereas, HTTP protocol for Herta sharing database connection.

Analytic Event messages

The integration sends the generated alarm to Milestone XProtect server, the alarms are sent as an Analytic Event. Therefore, in this panel, the user can setup what information send to Milestone.

- **Name:** Add subject name
- **Surname:** Add subject surname
- **Code:** Add subject code
- **Group:** Add subject group
- **Match score:** Add the subject match score. Notice this value only works for identification alarms.
- **Detection:** Attach detection image to the Analytic Event.
- **Camera frame:** Attach frame image that subject was detected/identified.
- **Subject model:** Attach the image that represent the subject.

It is important to note that analytic events can trigger actions in Milestone XProtect. In case you want to configure them please jump to the Analytic Events section.


Notification

Select what kind of notifications you want to generate through the integration, **Milestone Analytic Events** and/or **Milestone Alarms**. For each kind of notification you can choose Herta detection and/or identification.

Information

Information section gives us some relevant information of the software, such as:

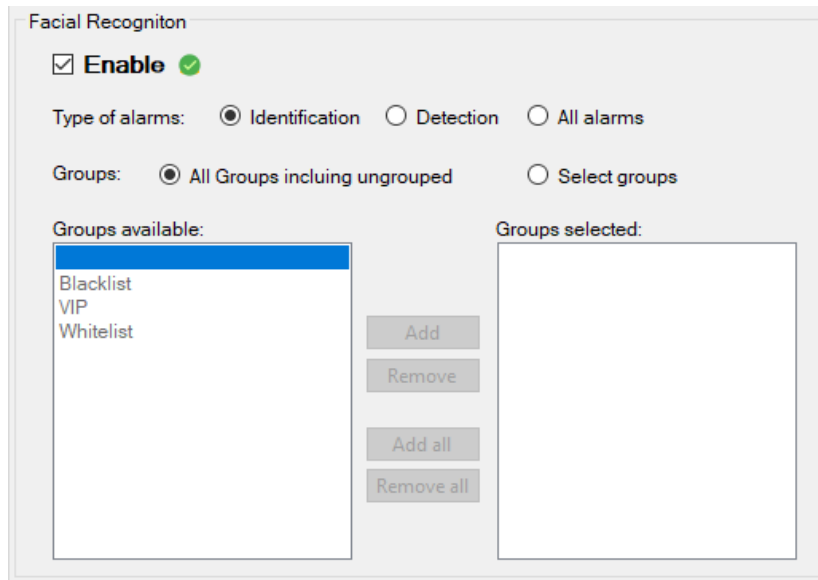
- **Product:** Information about Herta license, as well as software version. Very important, version field must be tag with a green approval.
- **Database statistics:** Information about the database.

| Information | |
|---|---------------------|
| Product | |
| Version: 3.2.10.378  | Max subjects: 1,000 |
| Expiry date: Perpetual | Max surveillance: 2 |
| Update date: Perpetual | Max forensic: 2 |
| Key ID: 134391365575237831 | Max access: 2 |
| Database statistics | |
| Version: 3.0.4 | Alarm number: 7,904 |
| Size: 773.01 MB | Subject number: 2 |

Cameras

Once the communication is configured and validated, we can start to configure the camera that we want to synchronise with Herta software.

1. Go to Devices → Cameras
2. Select the desired camera to synchronize and check Facial Recognition tab located at the bottom of camera properties.
3. Check Enable camera for synchronize it.
 - Select the what kind of identification alarm you want to receive.
 - Select the kind of alarm to synchronize (detection, identification or both).



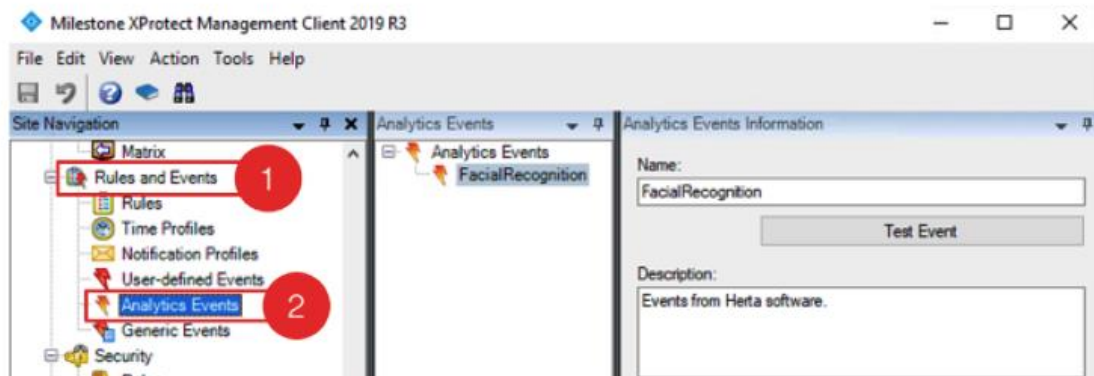
The image shows a 'Facial Recognition' configuration window. At the top, there is a checkbox labeled 'Enable' with a green checkmark next to it. Below this, there are three radio buttons for 'Type of alarms': 'Identification' (selected), 'Detection', and 'All alarms'. Underneath, there are two radio buttons for 'Groups': 'All Groups including ungrouped' (selected) and 'Select groups'. The window is divided into two main sections: 'Groups available:' on the left and 'Groups selected:' on the right. The 'Groups available:' list contains 'Blacklist', 'VIP', and 'Whitelist'. Between these two lists are four buttons: 'Add', 'Remove', 'Add all', and 'Remove all'. The 'Groups selected:' list is currently empty.

Set up Alarms using Analytic Events

This section explains how to trigger an alarm using Analytic Events. Please open XProtect Management client and follow the next steps for the configuration.

Set up the Analytic Event

1. Click Rules and Events
2. Click Analytics Events
3. Right Click on it → Add New
4. Name: FacialRecognition
5. Description: Optional
6. Save on Menu to Save Changes

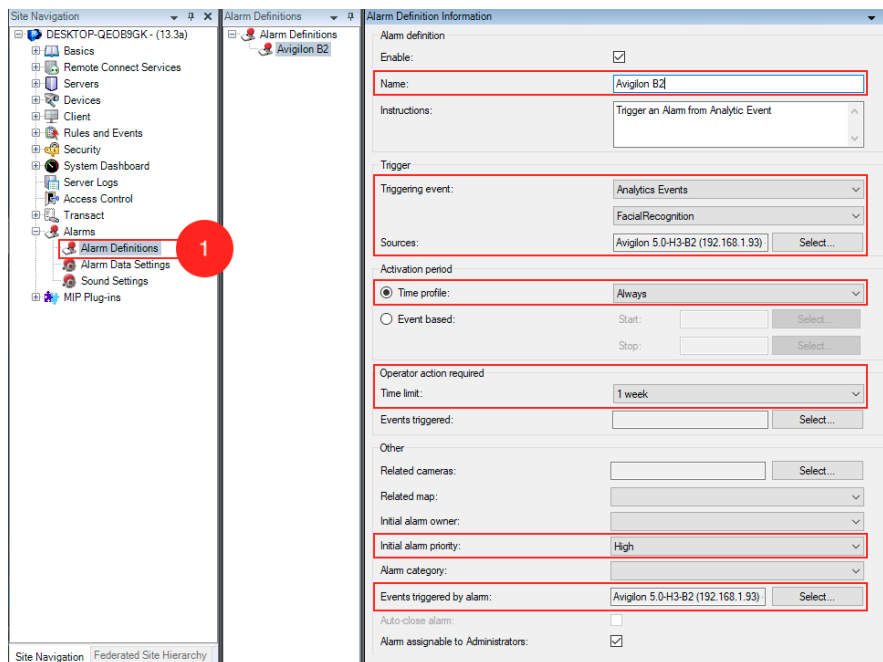


Set up Alarms Definitions

It is necessary to create an alarm definitive for each camera that you need to send alarms.

1. Select Alarms
2. Select Alarm Definitions
3. Right Click on → Add New
4. Name: CameraName to send the alarm
5. Trigger:
 - Triggering Event: select Analytics Events and below in the drop-down menu, 'FacialRecognition',
 - Sources: select the source to trigger event
6. Activation period:
 - Time Profile: Always
7. Operator action required:
 - Time Limit: Any Time
8. Other:
 - Initial Alarm Priority: High
 - Event triggered by alarm: CameraName to send alarm.

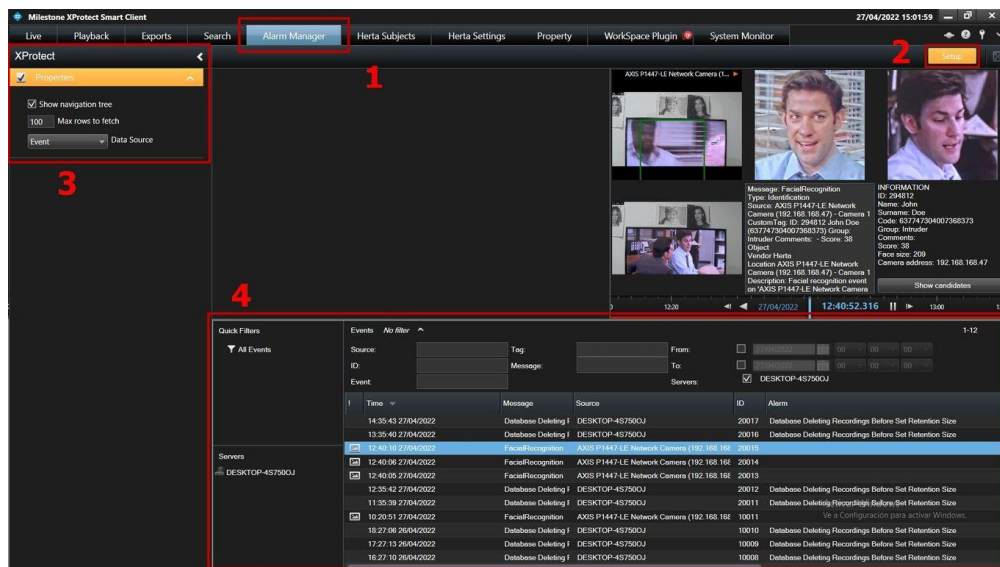
You have successfully added Analytics Events and Alarms to Milestone.



Now head back to XProtect Smart Client and you should receive the alarms based on the group that was selected or the alarms that were set up.

From within the XProtect Smart Client, select “Alarm Manager tab” and follow the steps:

1. Select Alarm Manager window in the grid.
2. Click on Setup and it will show the information at the left.
3. Choose Data Source and select Events or Alarms.
4. Then, when Herta software generates an alarm, you will be able to see this event information within the alarms list.



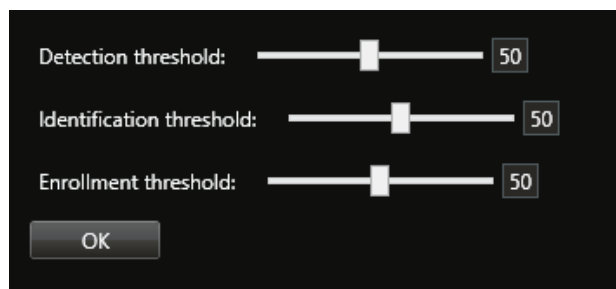
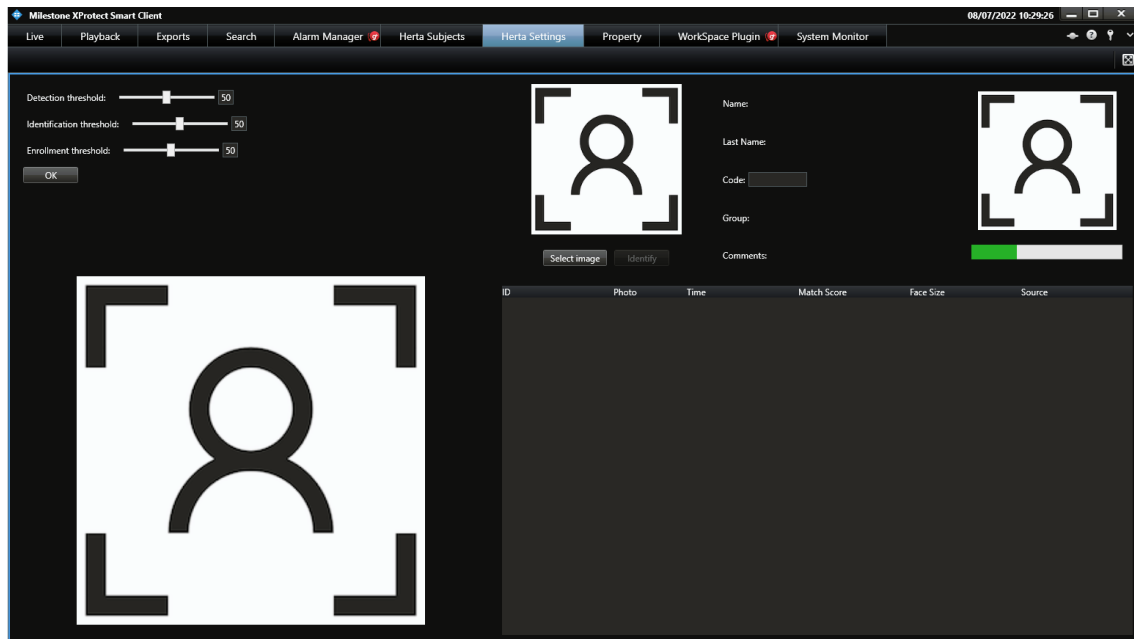
The alarm's data can now be seen in the field "Tag". To activate/deactivate which fields can be seen in the XProtect Smart Client, you have to right-click in the Event's Tab header. This will pop-up a dropdown list that showcases the alarms with all the parameters.

Now that we are receiving and checking the alarm's data, we can also trigger rules from the events that the integration is sending. This requires to have an Analytic Event defined in the XProtect Management Client. In order for this triggers to happen, the name of this Event must be Herta. Once we have created the Event, you can trigger the alarms and configure them. Follow the steps below to successfully trigger alarms from the Analytic Event Herta.

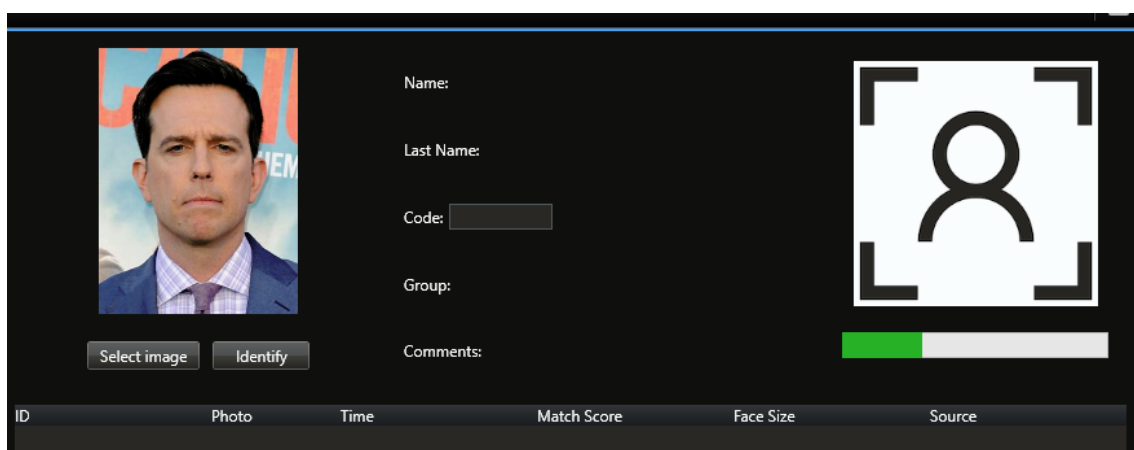
Herta Settings tab

Within the Herta Settings tab, you can do the following:

- Set up your desired detection, identification and enrolment thresholds from the Herta system. Just set the desired values and press OK.

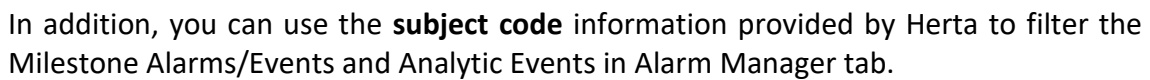


- Identify a person by uploading a stored image, using Herta facial recognition.

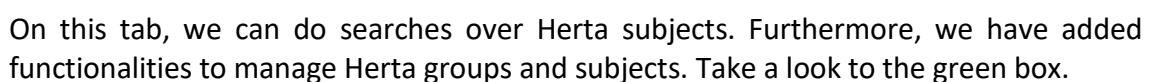


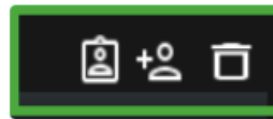
First, click on **Select Image** button and select the desired image from your disk. Then, press **Identify** button to start the Herta facial recognition process.

It will be shown the best Herta subject candidate and you will get a list of the latest Herta alarms of this identified subject.



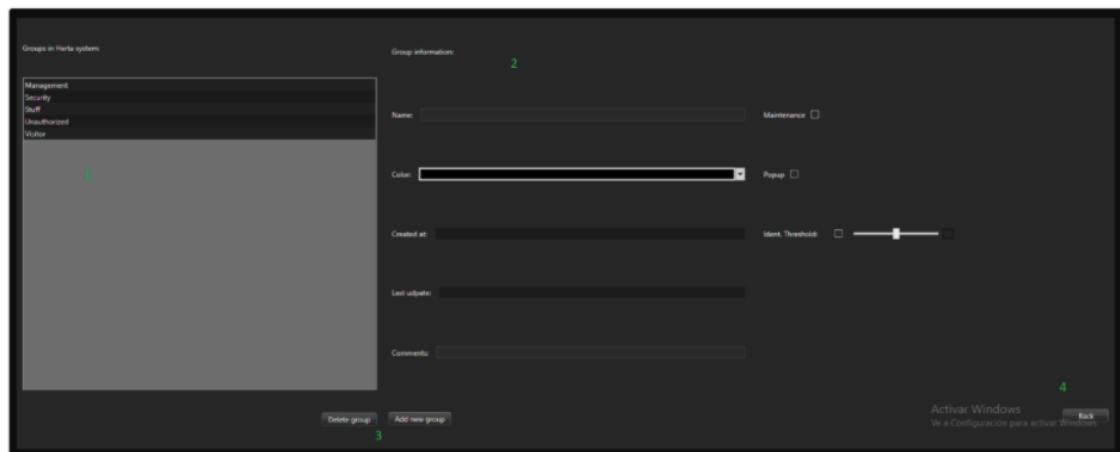
If we go to Herta subjects tab, we can find a way to list and manage Herta subjects within the Milestone XProtect system.





These three buttons have the following functionalities (from left to right):

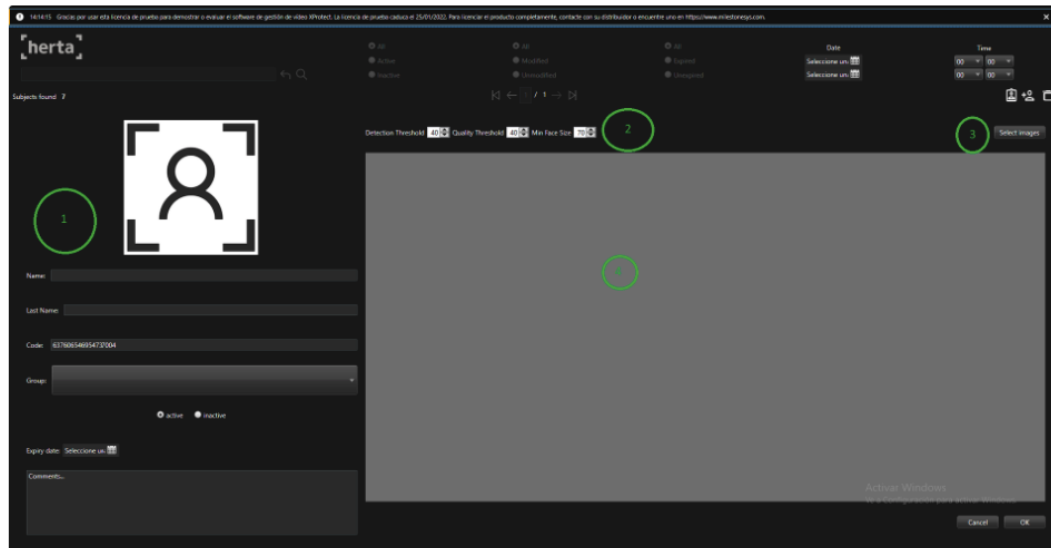
Group management



- **Groups panel:** It shows Herta existing groups. By clicking over a specific group, we can see its information in the right panel “Group information”, and we can update it.
- **Group information panel:** If no group is selected from the left panel, you will be able to create a new group filling in all the fields and by clicking on “Insert group”. And if a specific group is selected, it will show its related information and you will be able to update it. Note that if you change the name of the group, a new group will be created, instead of updating the existing one.
- **Delete group button:** We can select an existing group and delete it from system by clicking “Delete group” button. Note that if this group has any users associated to it, you will not be able to delete it.

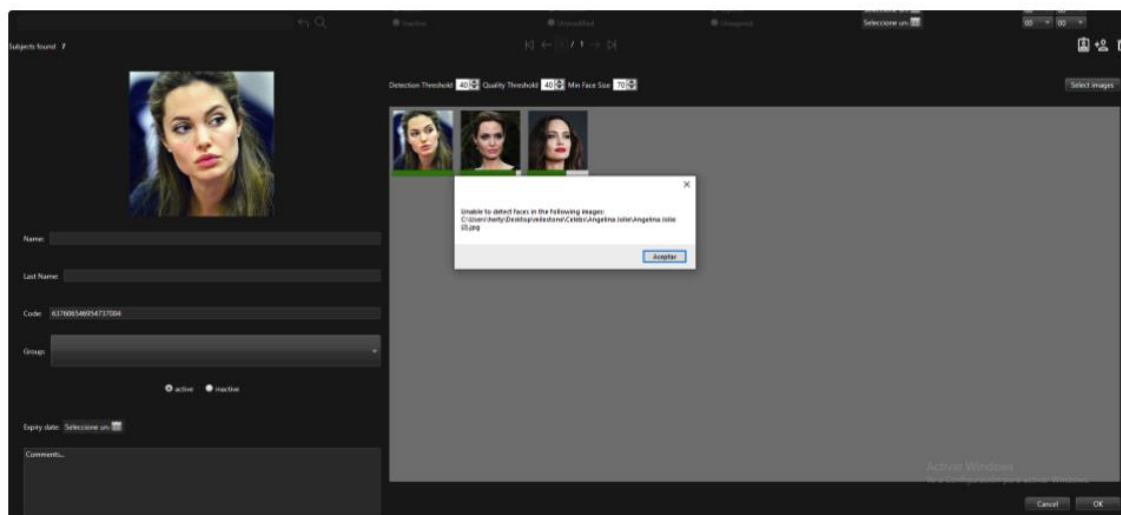
In addition, we can use “Update group” / “Insert group” button in order to update/insert a group.

Subject enrollment



1. **Subjects information and best face image**
2. **Enrollment thresholds:** Determine the parameters of the enrollment
3. **Select images button:** Allows us to select some facial images from disk.
4. **Subject images panel**

Note: If we try to add images that does not comply with the specified quality values (no face detected, poor quality or low face size), a pop-up will be shown, specifying which images were not able to be processed.



Delete subjects

We can select one or more subjects from subjects search table, and delete it by clicking this button.

Subjects found: 7

| Status | Photo | Name | Last Name | Code | Group | Action | Comments | Created | Modified | Expiry |
|--------|-------|----------|-----------|--------------------|-------|--------|----------|---------------------|---------------------|--------|
| | | and bosa | and bosa | 617608994740427570 | | Yes | - | 28/06/2021 13:41:28 | Never | Never |
| | | bosa | bosa | 402 | | Yes | - | 28/06/2021 13:25:10 | Never | Never |
| | | and bosa | and bosa | 208 | | Yes | - | 28/06/2021 13:28:02 | Never | Never |
| | | and bosa | and bosa | 208 | | Yes | - | 28/06/2021 13:28:11 | Never | Never |
| | | and bosa | and bosa | 208 | | Yes | - | 28/06/2021 13:28:04 | 28/06/2021 13:28:40 | Never |
| | | and bosa | and bosa | 208 | | Yes | - | 28/06/2021 13:27:58 | 28/06/2021 14:17:58 | Never |
| | | and bosa | and bosa | 208 | | Yes | - | 28/06/2021 13:27:58 | 28/06/2021 14:17:58 | Never |

Warning

Are you sure you want to delete 4 subjects?

Active Window
We're configuring your Active Windows.