SAIMOS

C3

CORE for

milestone | XProtect®

QuickStart

Version: 2019 R2 (3.2.4)

This is the SAIMOS C3 CORE QuickStart guide. It has the goal to get you up and started with C3 CORE with Milestone XProtect. It will cover the most important steps to get a CORE channel up and running. For in depth information please refer to our C3 Manual.

1 Content

2 What you need to start

- A PC running Windows and meeting the minimal requirements stated in [Requirements](#)
- Milestone XProtect 2018 R3+ installation already running and configured to your liking
- All the required installation Packages
  - o SAIMOS C3 Server
  - o SAIMOS C3 Node
  - o SAIMOS C3 CORE Plugin

2.1 About SAIMOS C3 CORE for ◆ milestone | XProtect®

SAIMOS C3 CORE brings the power of the C3 Analytics Framework to Milestone XProtect® in a fully integrated way. It provides different algorithms for several use cases like perimeter security, people counting and left/removed object detection. The combination of C3 CORE and Milestone XProtect® enables users to profit from field proven analytics functionality of C3 while using the full capabilities of Milestone XProtect® for a comprehensive solution experience. The C3 CORE system is fully integrated into Milestone XProtect® Essential+ or higher via Plug-In and can be configured directly within the Milestone XProtect® Management Client.
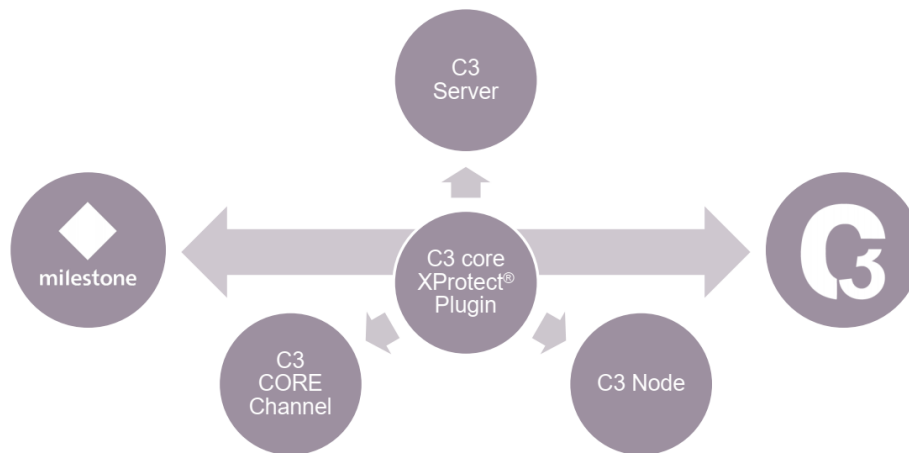
3 Requirements
3.1 Minimal software versions & prerequisites

Software	Version
C3 Server	2019 R2
C3 Node	2019 R2
Milestone XProtect	2018 R3 • Essential+ • Express+ • Professional+ • Expert • Corporate
SAIMOS C3 CORE Plugin	2019 R2 • Visual C++ Redistributable 2015 • .NET Framework 4.7

3.2 Minimal Performance Requirements for C3

Component	min
CPU	Intel or AMD based CPU with 4 physical cores Passmark: 5000 Single Thread Performance: 1900
RAM	4 GB
HDD	50 GB
Network	Gigabit Ethernet
OS	Windows 7+ 64 Bit Ubuntu 16.04/18.04 64 Bit

4 Installation
4.1 What will be installed

Main component	Sub components
C3 Server	Python 2.7 (plain install for virtualenv creation)
	PostgreSQL 10
	Microsoft Visual C++ 2010 Redistributable Package (x64) (only for Windows OS)
	Microsoft Visual C++ 2013 Redistributable Package (x64) (only for Windows OS)
C3 Node	Microsoft Visual C++ 2010 Redistributable Package (x64) (only for Windows OS)
	Microsoft Visual C++ 2013 Redistributable Package (x64) (only for Windows OS)
C3 CORE Plugin	just the plugin

4.2 Install SAIMOS C3

Run the SAIMOS C3 Node and SAIMOS C3 Server installer with administrator rights and follow the guided installer process until the installer indicates it is finished. After successful installation you should see the SAIMOS C3 Node and Server icon in the Windows Taskbar in green:

C3 Node running:

C3 Server running:

After you have installed the two components you can leave them be and configure everything from within the Milestone XProtect Management Client if desired. Otherwise you will be able to enter the SAIMOS C3 web interface via

https://localhost:44444

and you can login with the default credentials:

Username: admin

Password: test

The SAIMOS C3 web server listens on all interfaces by default so you can also access it from another machine in the same network via one of the IP addresses of the machine. Please refer to the C3 Manual for further information.

4.3 Install SAIMOS C3 CORE Milestone Plugin

Just follow the guided installer of the plugin and it will do the rest for you. After successful installation of all components you should be able to configure SAIMOS C3 core from within the Milestone XProtect Management Client. Within the Milestone Management Client the C3

Server icon should be visible in the Servers section (⬛). If you click on the C3 Server section you will be able to add C3 Servers and start with your [configuration](#).
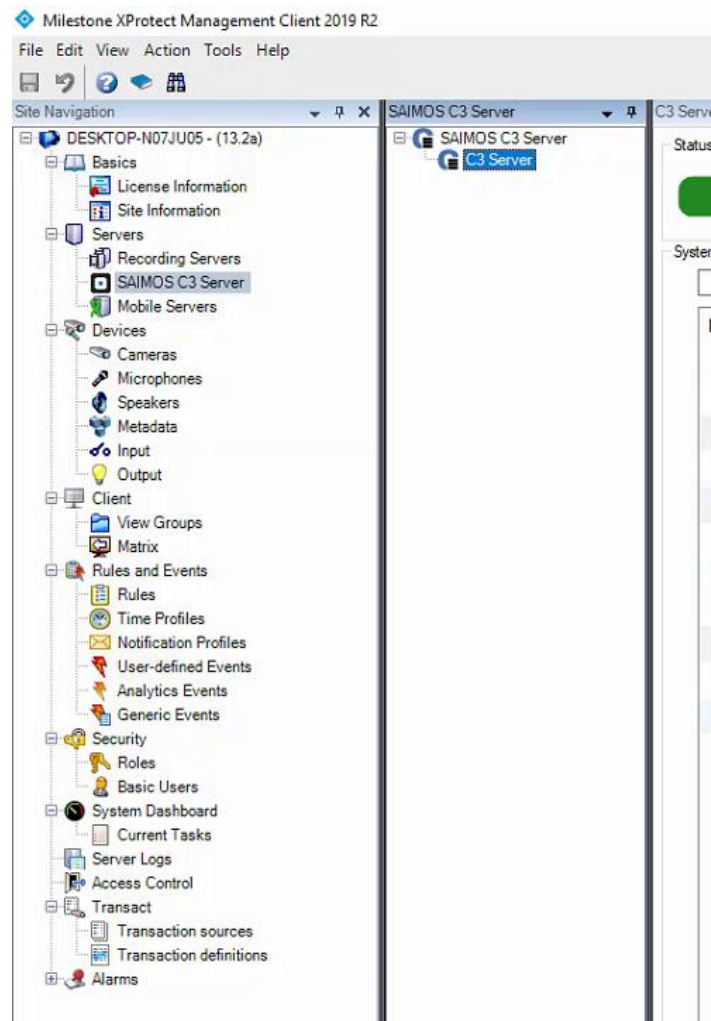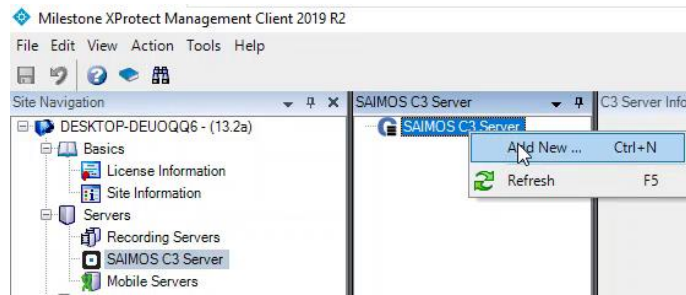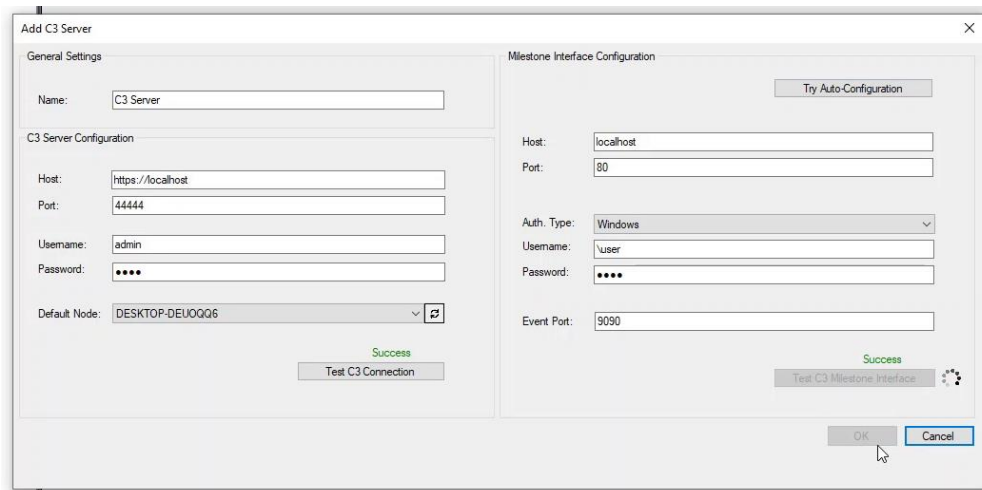
5 Configuration

This section will show you how to get a SAIMOS C3 Server configured with Milestone XProtect and how to create a channel. It will give you some details on how channels work and what the most important settings are. Everything else you can find in our C3 CORE Manual.

5.1 Add C3 Server

To add a C3 Server to XProtect right click on the *C3Servers* entry in the *Servers* section of the Milestone XProtect Management Client and select *Add New ...*

A new dialogue will open where you can fill out the necessary information:

Section	Field	Description
General Settings	Name	Your name for the new C3 Server. Choose wisely.
C3 Server Configuration	Host	Host address on which the C3 Server is running Standard: https://localhost

Section	Field	Description
		If the server runs on a different machine localhost has to be switched for the IP of the host machine
	Port	The port on which the C3 Server is running Standard: 44444
	Username	Username for C3 Server authentication Standard: admin
	Password	Password for C3 Server authentication Standard: test
	Default Node	The default node to run C3 CORE channels on. If no node has been created yet, the plugin will create a node on localhost automatically.
	Test C3 Connection	Test your connection to C3.
Milestone Interface Configuration	Try Auto-Configuration	Try to find the best settings for Milestone configuration automatically (recommended)
	Host	IP or hostname of the Milestone Management Server
	Port	Port of the Milestone Management Server
	Auth. Type	Choose the authentication type. Currently only Windows is working properly with Milestone + Products
	Username	Username with which the C3 Server should log into Milestone XProtect to communicate Windows authentication is required (basic users are not supported)
	Password	Password for the above username
	Events Port	Port where Analytic Events can be sent to XProtect Standard: 9090 Be sure the port is activated.
	Test C3 Milestone Interface	Test if the connection to Milestone from C3 is successful.

After you have entered the necessary information click *OK* to confirm. Now it can take a few seconds to add the server as the following automatic tasks are performed for you:
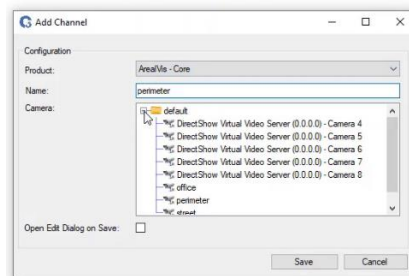
1. Server connection is tested
2. Milestone Interface within C3 for communication is automatically generated.
3. Initial configuration is fetched from the C3 Server

Now you should have successfully added the C3 Server and you should see an empty Server view (if it is a fresh installation without any channels) and you are ready to create channels.
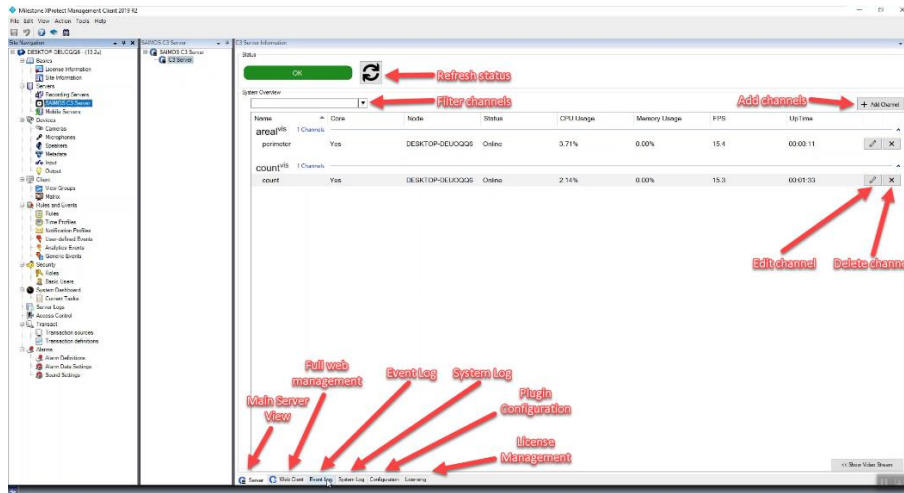
5.2 Add CORE channel

To add a CORE channels simply click on the *New* button on the bottom of the *C3 Core Channels* view. A new dialogue will open and you will have to provide the following information:


| Field	Description
Product	Choose the product you would want the channel to run. Options are • arealvis (perimeter and areal security) • countvis (people and object counting) • objectvis (left and removed object detection) For each option you can choose between a standard channel (full C3 channel) and a C3 CORE channel.
Name	Choose a name for your channel (choose wisely)
Camera	Select the camera from the chosen device group
Open Edit dialog on save	Check if you want to configure the channel immediately after creation. The plugin will open the edit dialogue automatically.

After you have entered the necessary information you can click OK to start the channel creation process. The following things will then happen automatically:

- The channel will be preconfigured with the chosen camera and the standard configuration
- Two zones/rules will be added to the channel (if applicable to the product)
- The Milestone Event forwarding will be created and activated (only arealvis) for the channel
- The created zones/rules will be added to the Analytic Events of the XProtect systems in the following format
  - CHANNEL NAME - RULE/ZONE X
- The created Analytic Events will be added as Milestone Alarms automatically

The channel will be started automatically and is ready for final configuration using the *Edit* mode.

5.3 Configure a CORE channel

To configure an CORE channel select it within the *Core Channel View* and then right click and choose *Edit Channel* or click the ⚙ button on the right side of the channel. A new dialogue will open that will enable you to configure the channel.
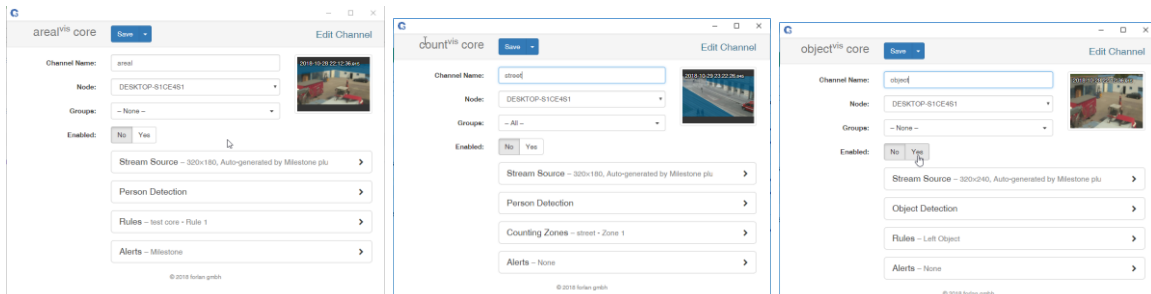
As most things are done automatically on channel creation the most important things to define are:

- arealvis
  - Person Detection and Rules
- countvis
  - Person Detection and the Counting Zones
- objectvis
  - Object Detection and Rules

Everything else should be set for a first channel configuration.

6 Licensing

The CORE plugin does not need to be licensed and is free to use. After installing the C3 Server and at least one C3 Node you will be able to use all product features for 30 days after installation without any limitations. After the trial period you will need to license your channels. After a license is expired (also the trial) all channels will stop working and will not start without a new license.

To License the product you will need to complete the following steps:

1. Create a license request and download its ZIP file via the license management
2. Send the license request with your reference to office@for-lan.at
3. Upload the license file once you received it from us (IMPORTANT: upload the license file as you receive it, do not UNZIP!)

From within the XProtect Management Client click the *Licensing* to open the License Management.


The License Management dialogue will open and you will be able to see an overview of your licensing situation. To create a license request click *Manage → Download license request*.
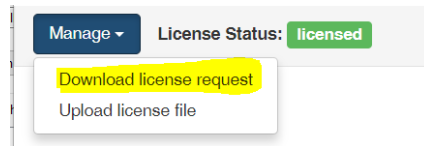
The sub dialogue will enable you to enter your customer information as well as enables you to select how many licenses you want to acquire for your license. CORE channel licenses are managed under C3 Core.
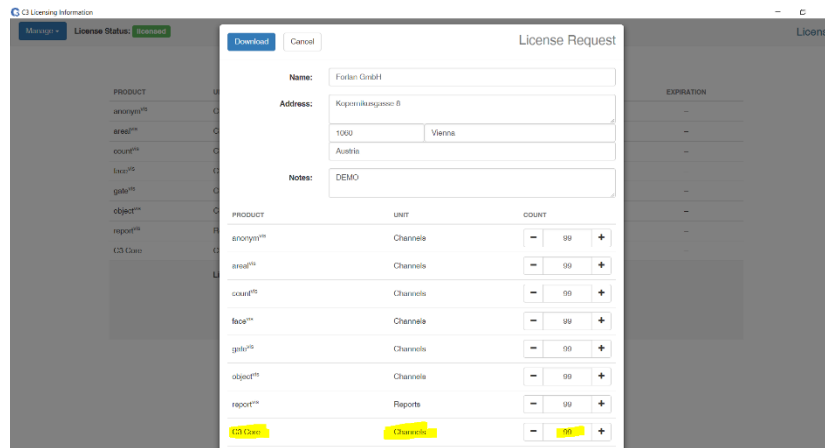
If you entered all necessary information. Click download to download the license request (license_request.zip). Use the system dialogue to find a proper place to save it. After you have sent the license request to office@for-lan.at after some time you will receive a license file back (ZIP). Use the ZIP file (don't extract) and upload it via the license manager. Using the command *Manage → Upload license file*. After you have successfully uploaded the license file your system will be licensed.

7 Count Plugin

If you have chosen a full install or chose to install the count plugin with custom installation, the Milestone Smart client will get an extension tab showing the count interfaces of SAIMOS C3 Count within this tab. The usage of the plugin is pretty straight forward. If you have a SAIMOS C3 Server already created you can choose this server and select the different count views the server provides. You can also fully make use of the Dashboard and combine different views. For further information on the count views please refer to the full SAIMOS C3 Manual.
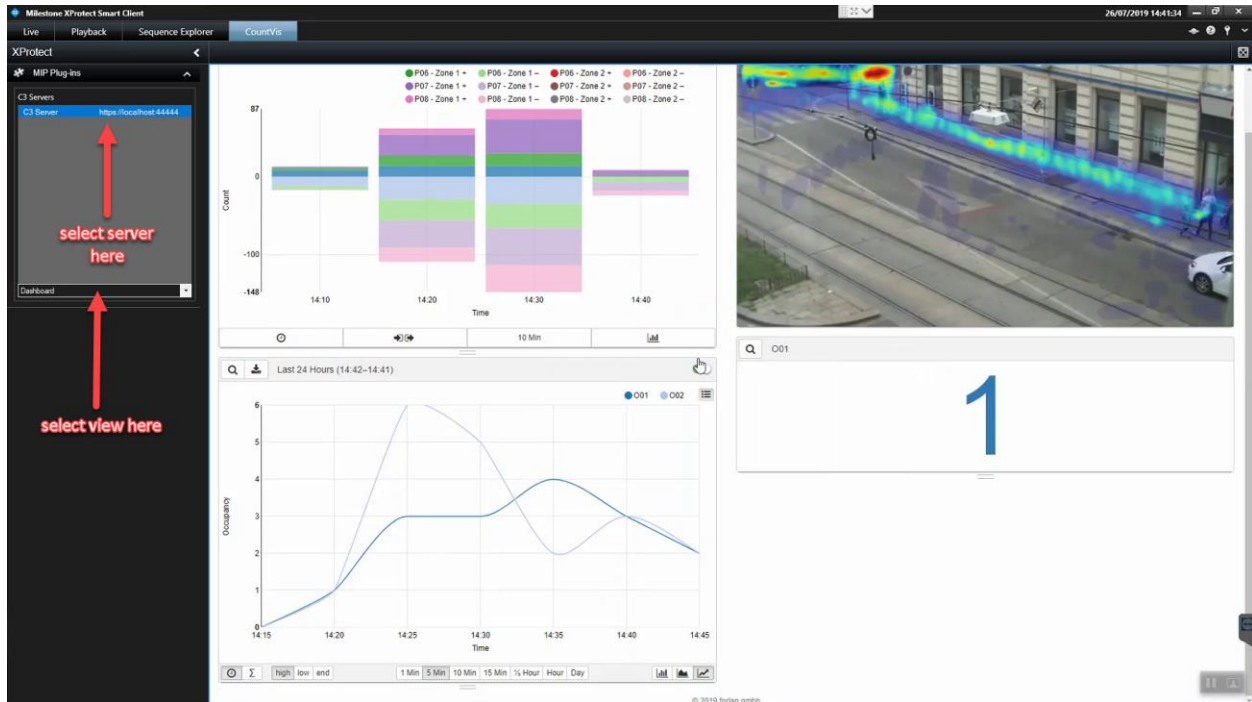
8 Face Plugin

If you have chosen a full install or chose to install the face pro plugin with custom installation, you will get the possibility to present face alerts from SAIMOS Face Analytics live with a special pop up view/custom view within the Milestone XProtect Smart Client. The pop up alarm is disabled by default, to enable it, go to the Milestone Smart Client *Settings* menu and tick the *Enabled* box within the *SAIMOS Alarm Notifications* section. You can also choose the appropriate C3 Server you want to receive alarms from as well as the analytics message to listen for. The standard is *face_recognized*.
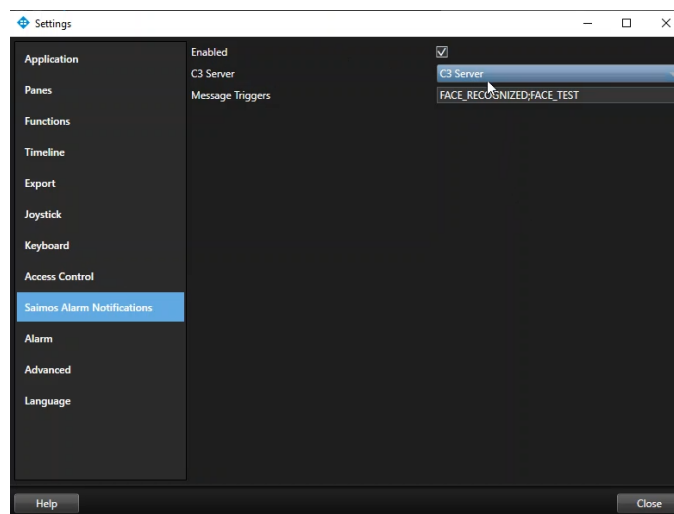
If you have successfully configured the plugin for the right C3 Server and analytics message and the Face Pro Analytics is sending Black- or Whitelist alerts to Milestone, you will be presented with a pop-up view that shows:

- The alarm camera with metadata (face and track)
- The person found with the archived image
- The person alerted with the current alert image
- A grid view of all related cameras of the Milestone Alert
- A control field to move to the next/previous alarm
- An alarm sound on pop-up creation (if alarm sounds are enabled within the smart client)
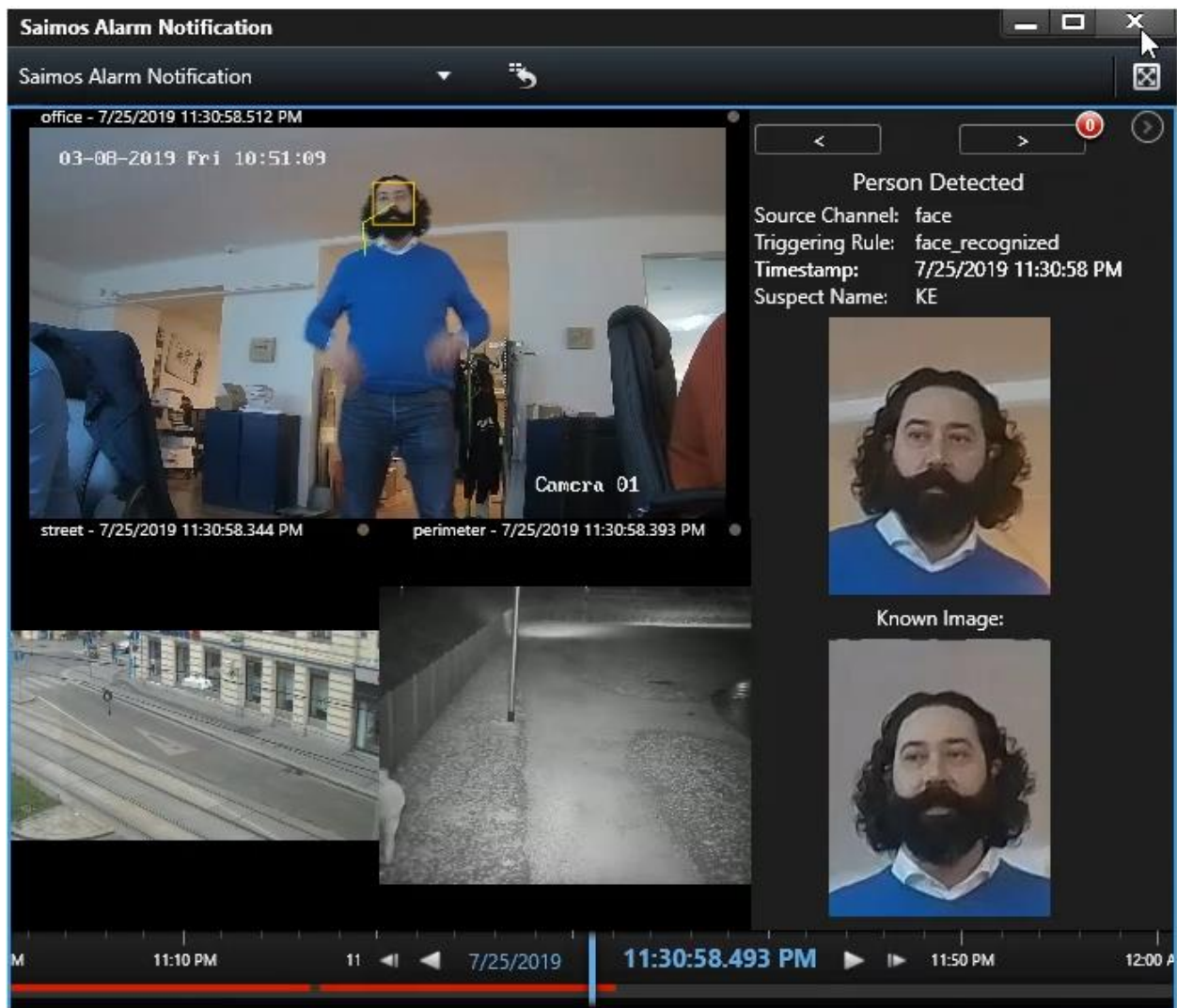
The pop-up view can also be permanently added to Milestone Smart Client as an independent view by using the setup menu and selecting the *SAIMOS Alarm View*.

9 Known Issues

- Error on Management Client or Smart Client start
    - o If you get white configuration pages or the Web Client tab does not show any output please install Visual C++ 2015 redistributable package on Windows.
- Changes in the Web-Client are not reflected in the Management Client Plugin
    - o If changes in the Web-Client are made they are not automatically refreshed within the Management interface. Be sure to press the big refresh button before you continue working within the Management Client
- No Web (config pages stay white)
    - o On some versions of Windows or with certain system restrictions the installer is not able to set the path variables properly. Please ensure that the following folders are set within the systemwide PATH variable of Windows:
        - `C:\Program Files\Milestone\XProtect Management Client\MIPPlugins\C3ManagementPlugin\`
        - `C:\Program Files\Milestone\XProtect Smart Client\MIPPlugins\C3SmartClientBasePlugin\`
        - `C:\Program Files\Milestone\XProtect Smart Client\MIPPlugins\C3CountvisPlugin\`

10 Support

If you face any problems please write us an email or call us in urgent cases.

Email: contact@saimos.eu

Phone: +43 699 1997 1596