Forensic Search Agent for Milestone XProtect

Bosch Video IP



BOSCH

en Quick Installation Guide

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1 Installation

1.1 Overview

The Bosch Forensic Search Agent is available as a plug-in for Milestone's Centralized Search, and enriches Milestone's search functionality to search for specific criteria.

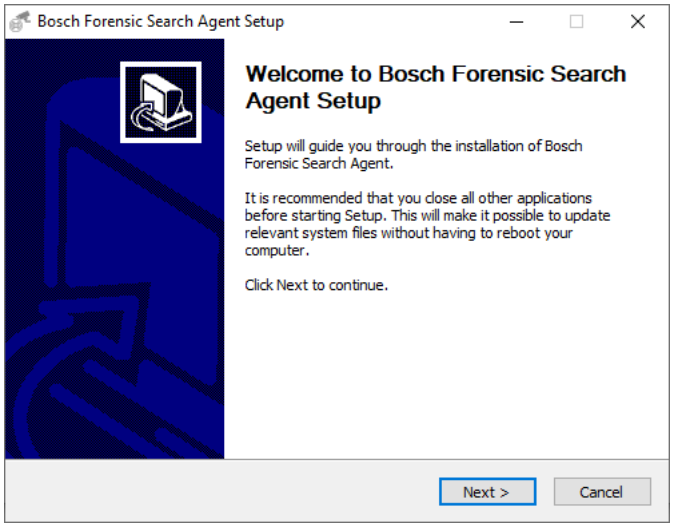
1.2 Prerequisites

- Operating system Windows 10 (64 Bit)
- Milestone VMS: XProtect 2019R3 Expert or Corporate or newer
- A Bosch camera connected to the Milestone XProtect VMS Product

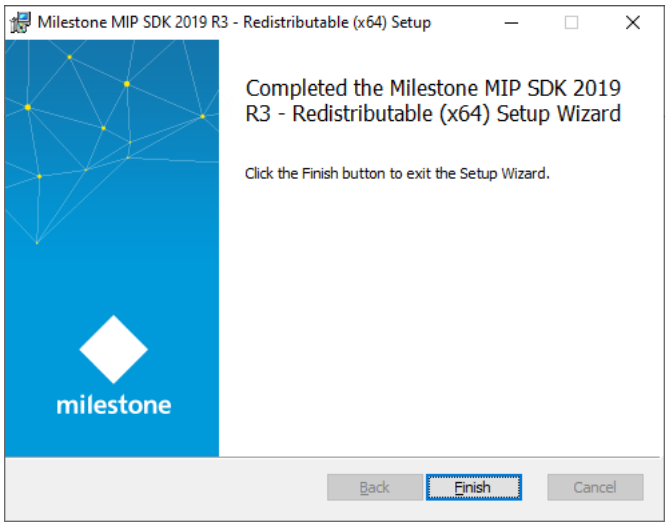
1.3 Installation procedure

The current version of the installer can be downloaded from the website
https://www.boschsecurity.com/ Partners | Meet our Partners | Milestone

1. After extracting the download package double-click on the top level **Bosch_ForensicSearchAgent*.exe** file to start the installation. Supporting installation packages may be installed during this process, if needed.
2. Follow the instructions of the setup wizard.

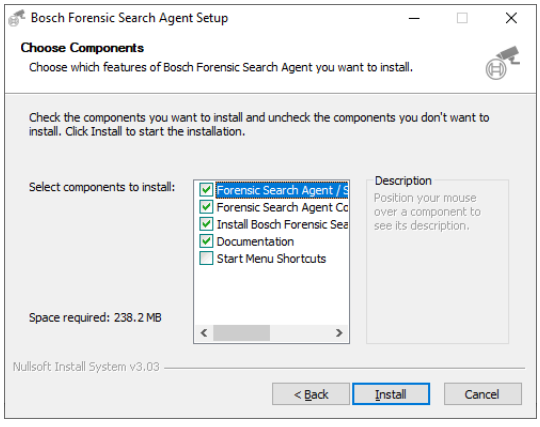


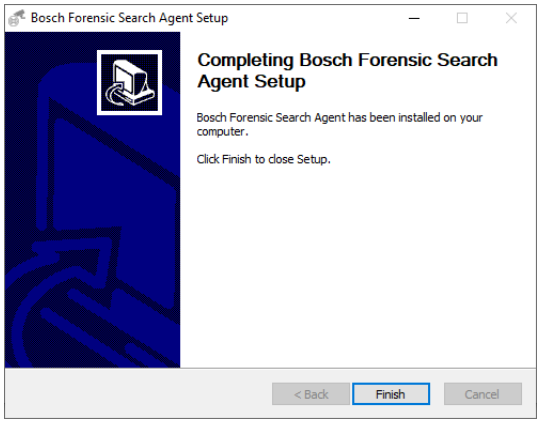
During the installation, the Milestone installer for the integration libraries will be executed.



After installing the Milestone components, the Bosch components can be selected:

- Forensic Search Agent (needed on the Smart Client)
- Forensic Search Agent Configurator (needed on the Management Client)





When the installation is complete, the plug-in files are installed in the default plug-in directory

- for the 64-bit plug-in:
  C:\Program Files\VideoOS\MIPPlugins\BoschForensicSearchAgent

The plug-in components are now available in the Milestone XProtect Administration Client, in the Smart Client, and an additional windows service component is installed. The **User Guide** and the **EULA** can be accessed via the start menu, in case this option was selected during the installation process.

2 Software components

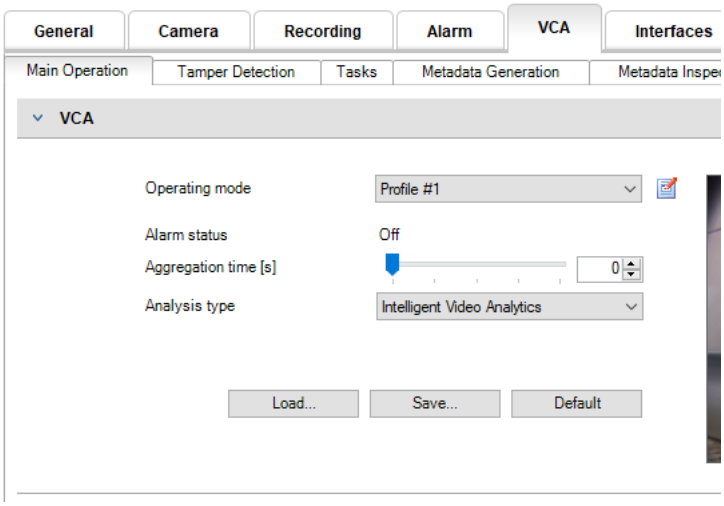
Several software components act together to form the Bosch Forensic Search Agent. The involved software components are:

- Bosch plug-in for the Milestone XProtect Management client
- Bosch plug-in for the Milestone XProtect Smart client
- Bosch Forensic Search service (process that performs the actual search)
- Bosch VCD Streaming service (process that delivers the connects to the Milestone database for metadata retrieval)

A detailed description of the software context is given in the next chapter.

2.1 Camera setup

The camera needs to run in either **Essential Video Analytics** mode or in **Intelligent Video Analytics** mode.



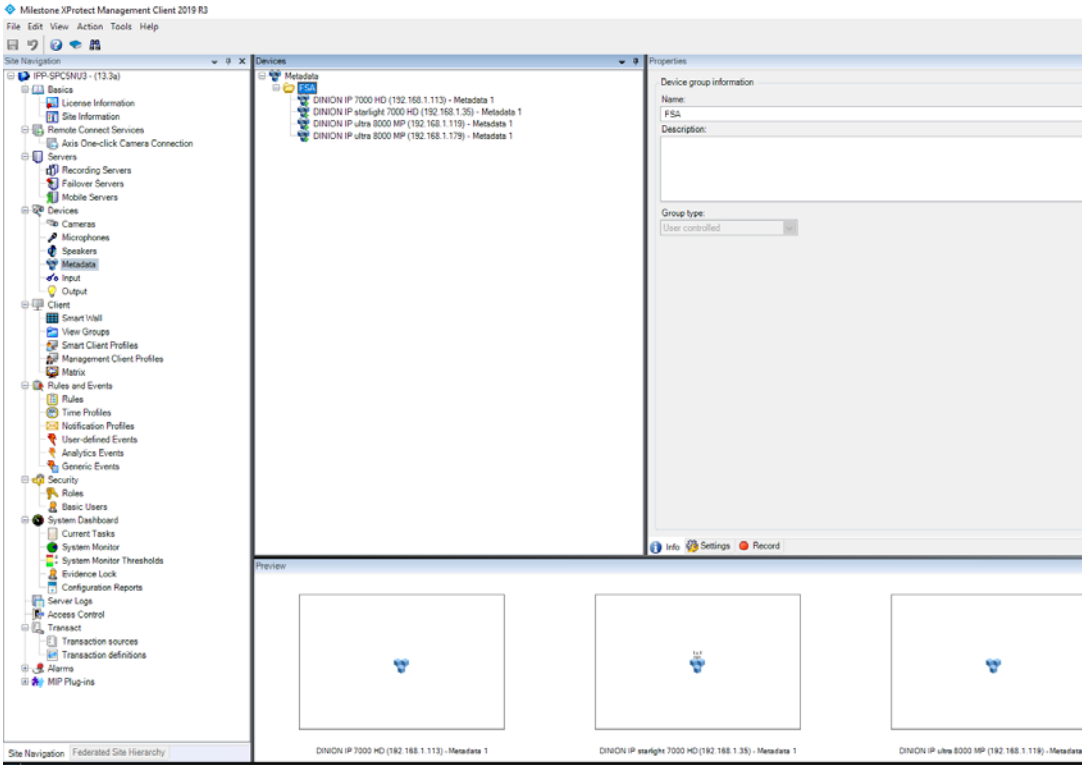
2.2 Administration client

The cameras that will be available for the Forensic Search Agent in the Smart client are configured via the Administrator plug-in, located in the Bosch Camera settings.

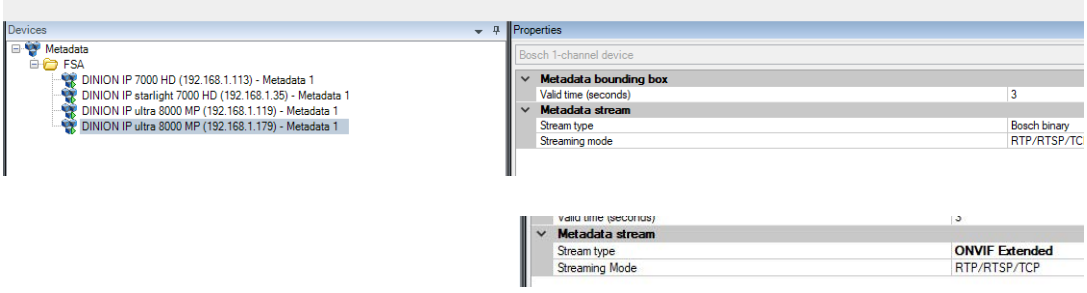
Note:

It is very much recommended to set up permanent recording to make best use of the Forensic Search use case scenarios.

The Bosch Forensic Search is using metadata from the edge (Bosch intelligent cameras), which is stored in the Milestone database. Therefore the metadata channel needs to be available and activated.

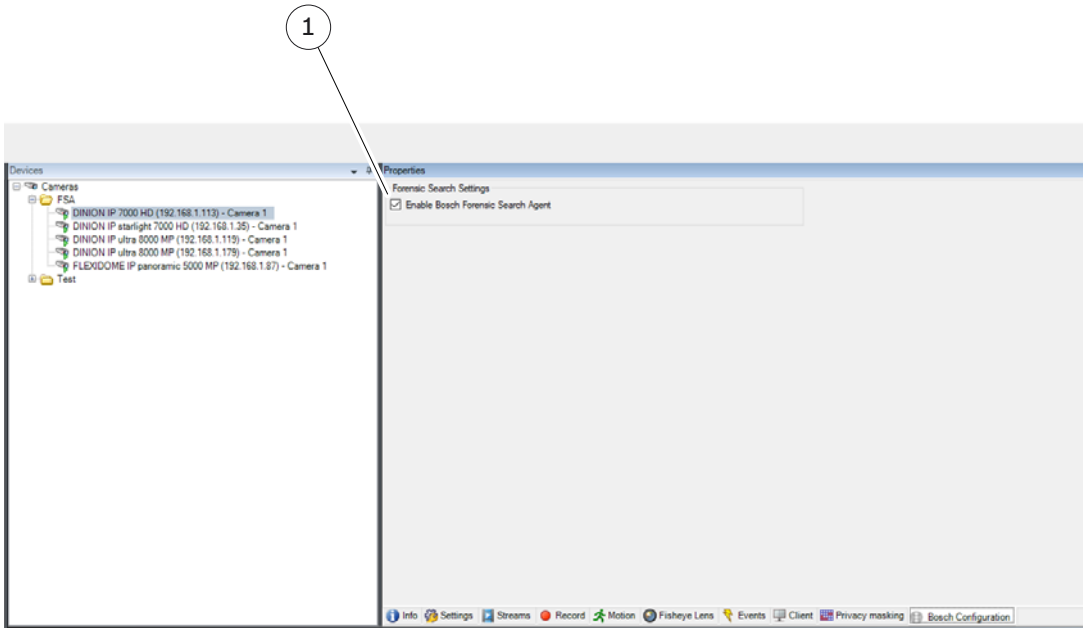


The selected metadata format in XProtect needs to be set to **Bosch binary or ONVIF Extended**. The ONVIF Extended mode provides both metadata formats (binary and ONVIF).



After the general metadata availability, the search functionality needs to be enabled via the Camera tab plug-in.

The checkbox (1) enables or disables the general availability of the selected camera in the Smart client's Bosch Forensic Search plug-in.



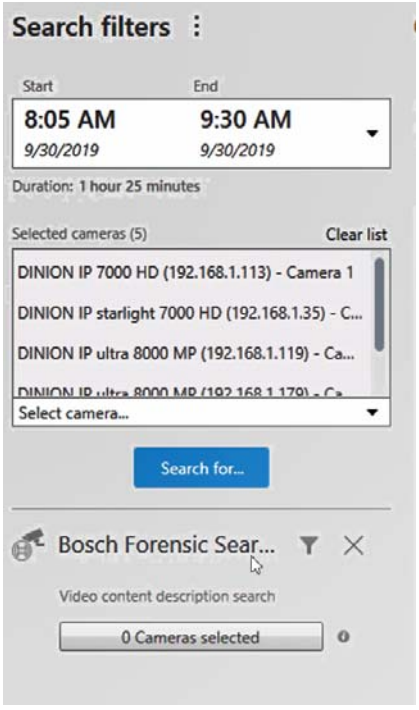
2.3 Forensic Search Agent plug-in

The plug-in hooks into Milestone's Centralized Search framework and exposes Bosch's forensic search functionality in the Smart client.

The Forensic Search allows to set up rules and events that were not initially set up.

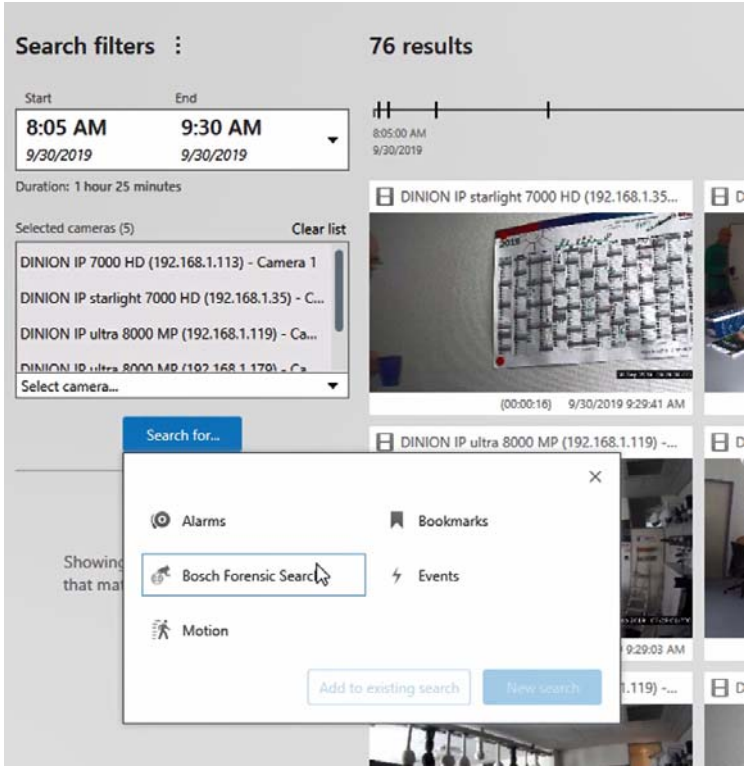
The Forensic Search Agent operates in the given search scope which is defining the search duration and provides a general selection of cameras for the search.

The general section **Search filters** allows to specify a search duration and it also allows to select a generic set of cameras for the search. This generic camera selection may be stripped in the Bosch Forensic Search filter, due to the fact that the Bosch plug-in only operates on Bosch Analytics cameras that run intelligent or enhanced video analytics, provide a metadata channel in XProtect and were enabled in the Management client for the forensic search.

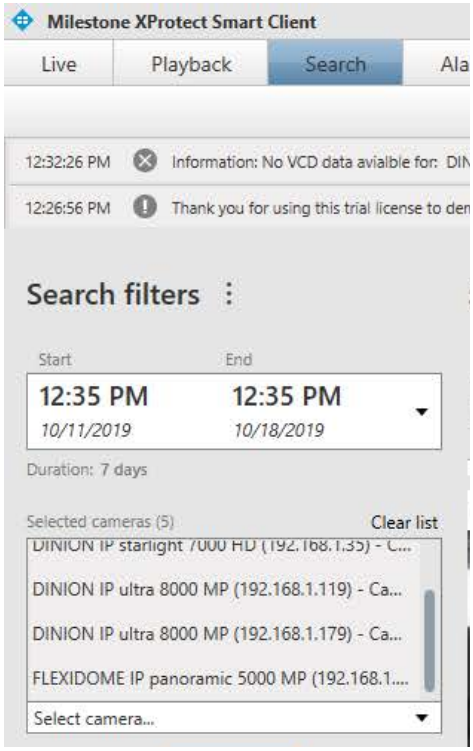


2.3.1 Using the Forensic Search Agent

The Bosch Forensic Search Agent is available via the **Search for...** button in Milestone's **Search** tab.

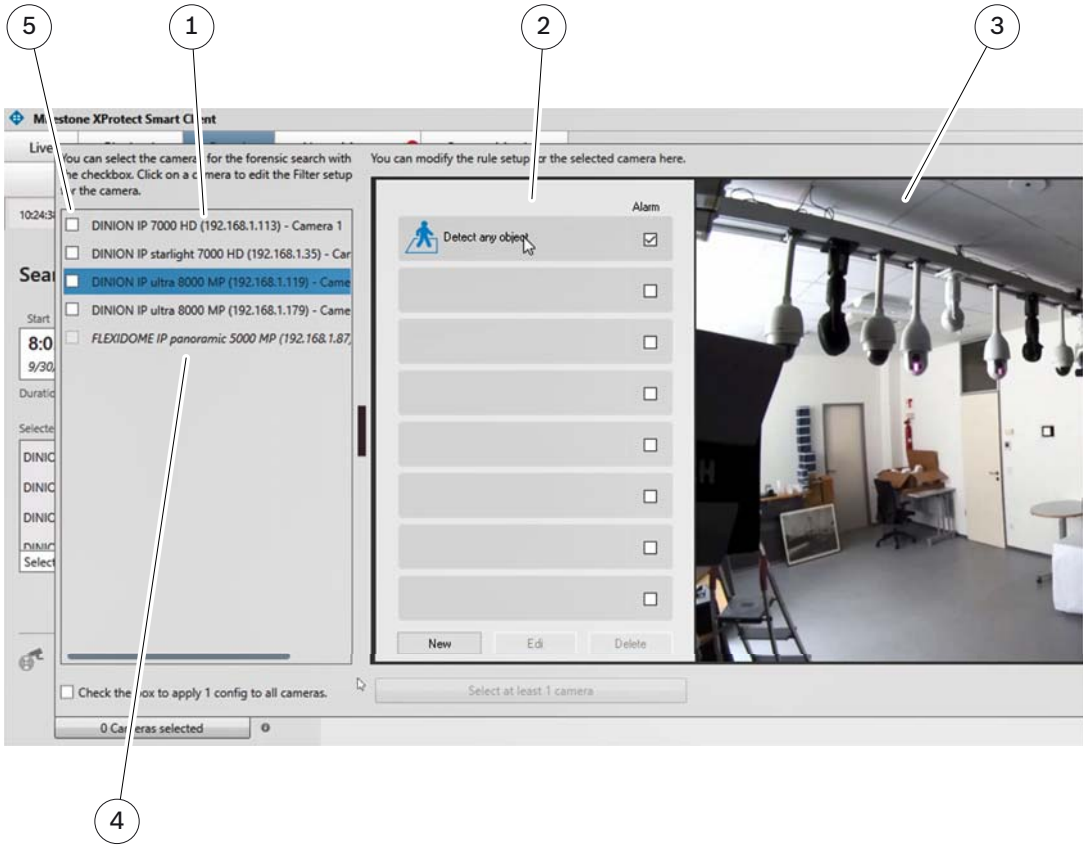


Selecting the Bosch Forensic Search entry activates the Bosch search plug-in and the following in-line filter control will become visible.



2.3.2 Configuration – Single Camera

The configuration window contains the list of preselected cameras (1), an area to set up the rules (2) for the search and a video area, that is used to setup any lines or areas that are needed for the search (3).



The preselected cameras are only active in case they were configured for forensic search in the administration client and have a metadata channel connected. Inactive cameras are shown in an italic font (4).

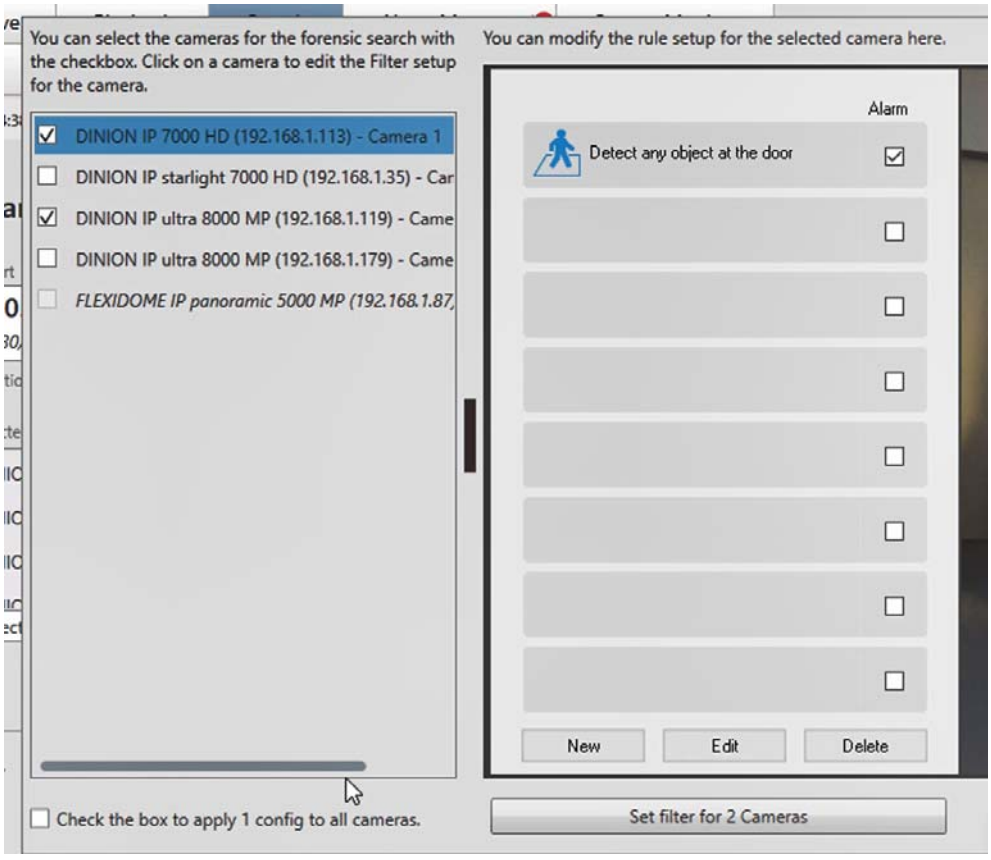
Clicking on an active camera loads the preview window and the Intelligent Video Analytics configuration that was set up on the camera in the given search scope time frame. This is needed to load the calibration data, which helps to setup more sophisticated searches.

To include a camera in an actual search, the check box needs to be checked (5).

Note:

For a deeper understanding of the configuration of the Bosch Video Analytics it is recommended to look into the Video Analytics Software manual, provided with this installation, available through the Windows start menu or by pressing the **F1** key when the configuration window is active.

The search is executed by clicking on the **Set filter for # Cameras** button.

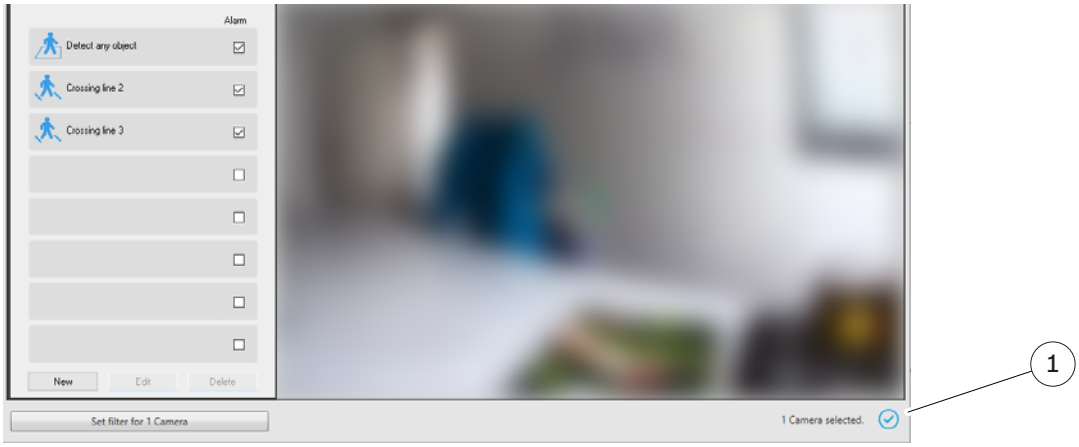


Note:

This is not in line with Milestone's user experience guidelines for the search agents, but it conforms to the well-known way of configuring and using the Bosch forensic search.

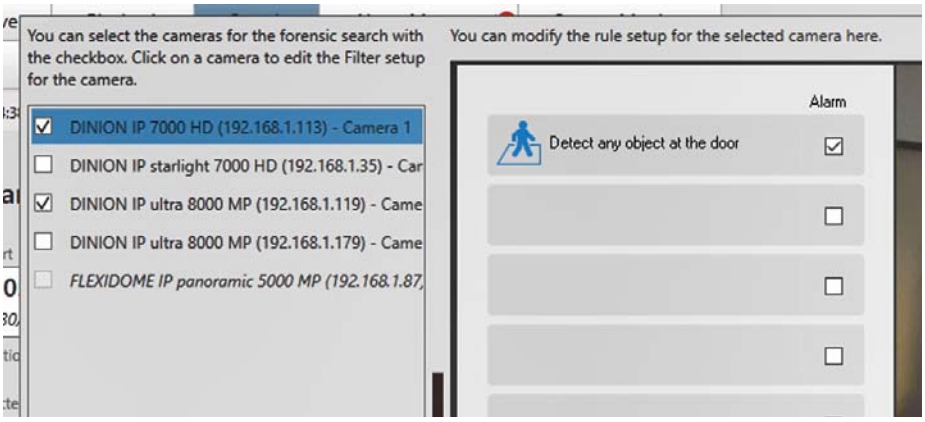
Status area

The search configuration provides a status overview in the bottom right corner (1). The status bar provides a short description of the current status and an icon to visualize that status. Additional status information is provided through the icon's tool tip.



2.3.3 Configuration – Multiple Cameras

It is also possible to configure more than one cameras for a search. The setup process is the same as explained in the previous chapter, with the possibility to apply the same configuration to all cameras in the search scope, as depicted below:



The last active rule configuration is used for all selected cameras.

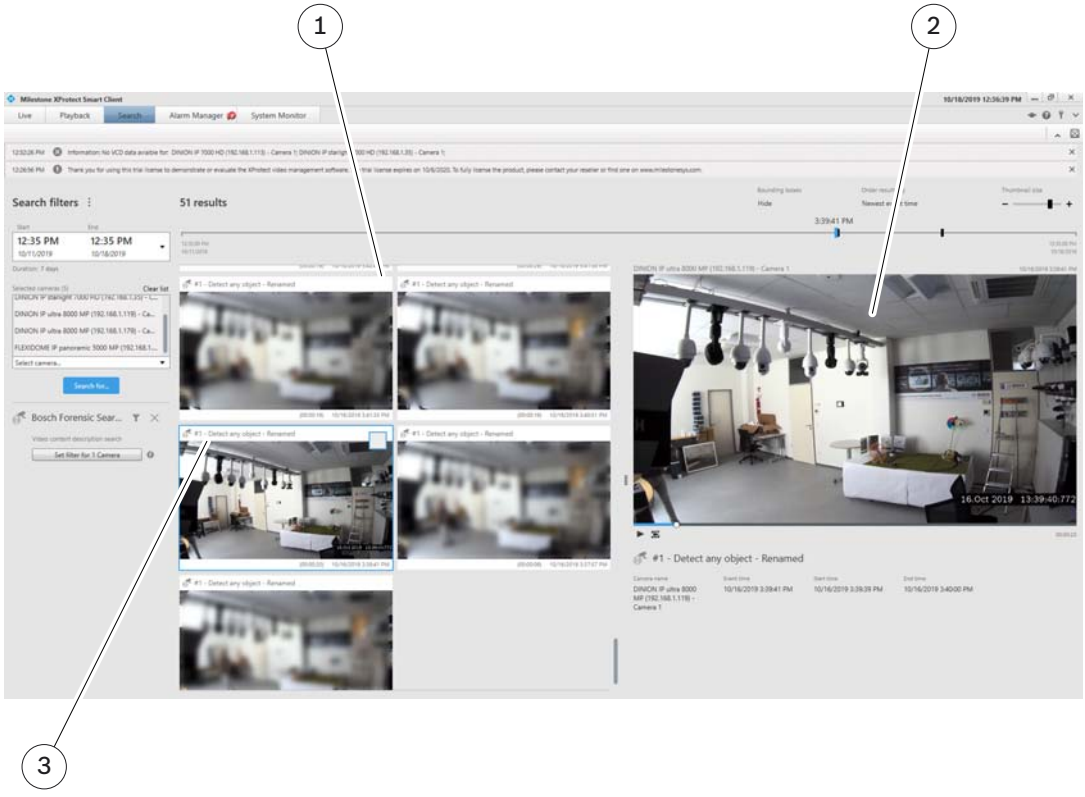
Note:

Not all scenarios make sense in this setup (e.g. a line crossing is usually specific to a certain scene and hardly transferable to a different camera view).

2.3.4 Search Results

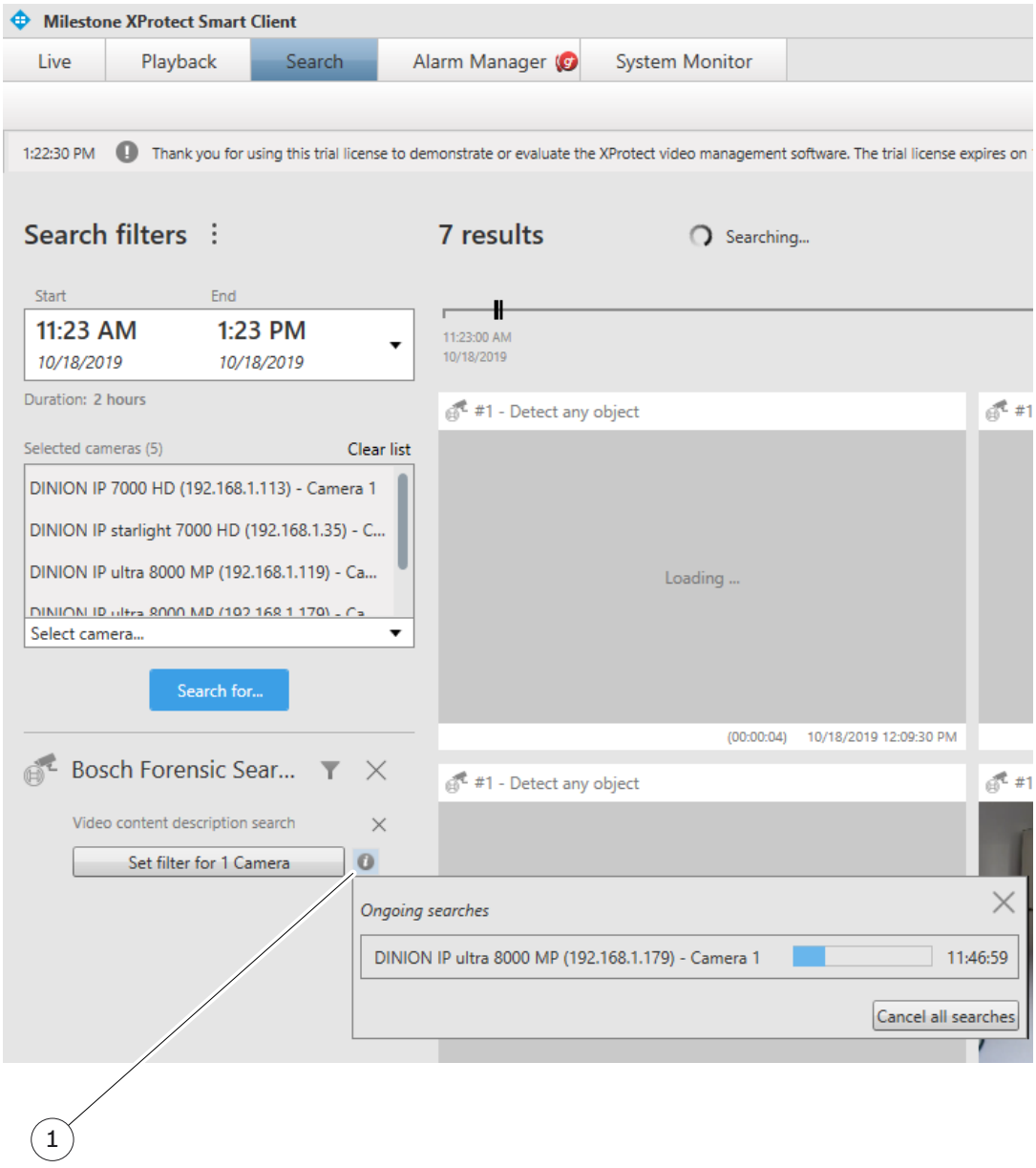
The search results are visualized in two areas in the Smart client. A thumbnail overview shows the search results preview (1). Clicking on the preview thumbnail updates the results details area on the right side of the view (2).

The thumbnails header includes the rule number and the rule name (3).



2.3.5 Search Progress

To be able to provide an overview on the current search status, a progress overview window can be opened by clicking the **i** icon as depicted below:



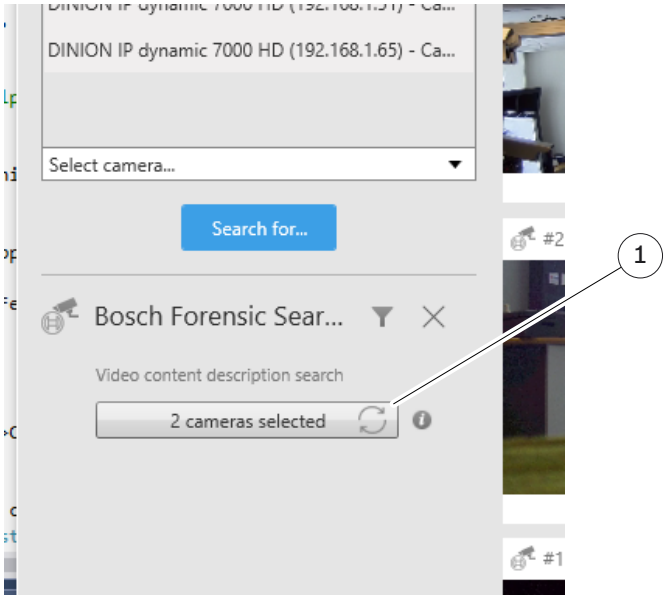
The progress windows shows the search status per camera and it allows to cancel all searches at once.

Note:

The search progress popup needs to be closed manually by clicking on the close button (**X**).

2.3.6 Reconfiguring the Search

If any of the general search filters (time scope and camera list) is reconfigured, the Bosch Forensic Search Agent is notified and provides a button (1) to re-run the search with the previous Bosch configuration setup and the newly set general search filters, if applicable.



Adding a new camera will most probably not create new results since this camera is not selected for the search per se.

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