Vaidio Plugins for Milestone
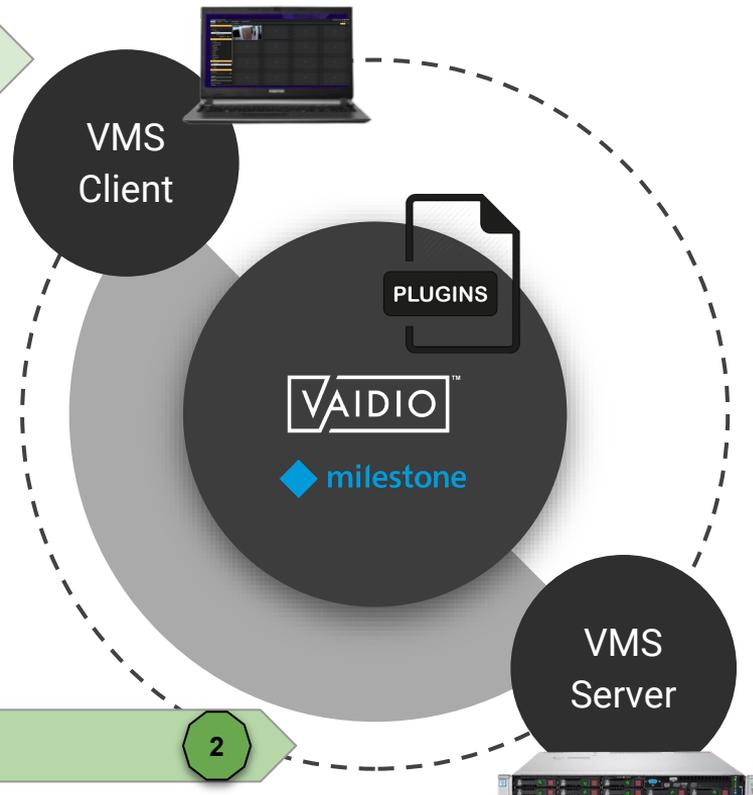
Contents

Vaidio Search & Mgmt Plugin

Click on the button to jump to the section

Technical support contact support@aicuda.world
Business contact sales@aicuda.world (EMEA) or sales@ironyun.com (Americas and ASIA)
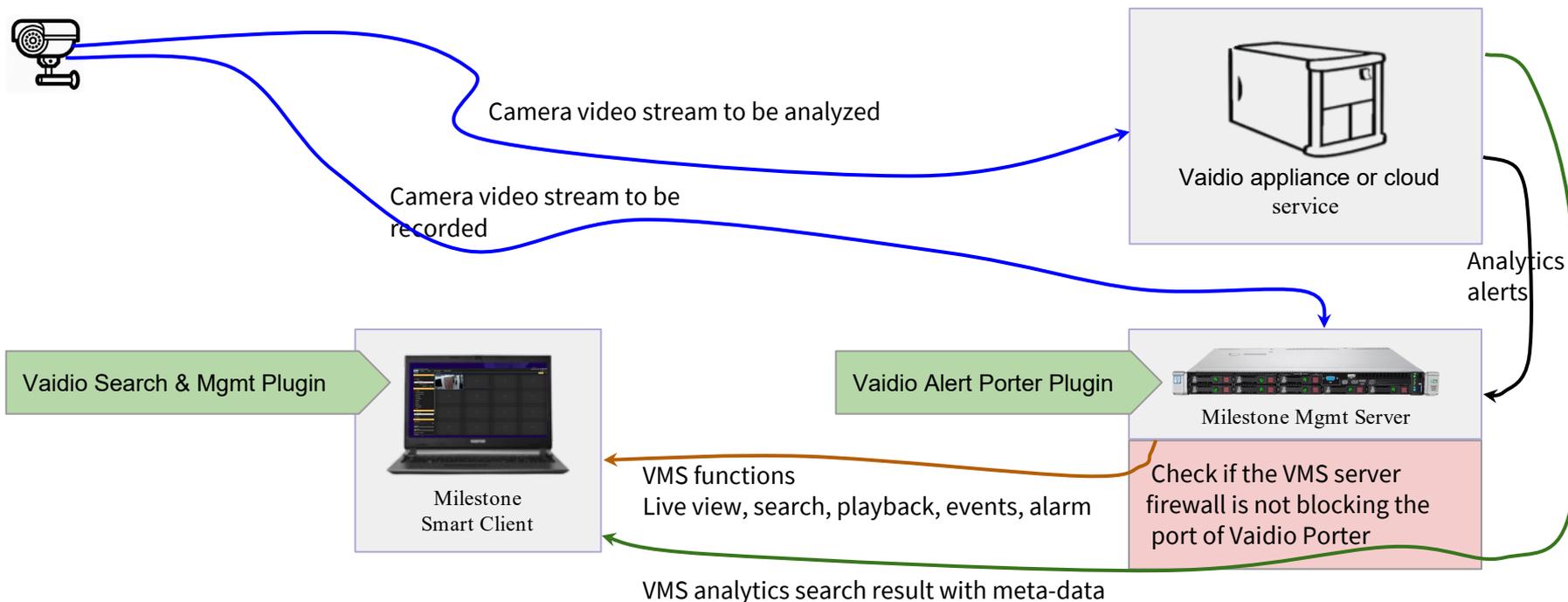
Preparations

Vaidio Search & Mgmt Plugin

A video analytics plugin for Milestone VMS and Smart Client. This plugin addresses two functions:
(1) The discovery & management of video analytic services (Vaidio) embedded in smart client.
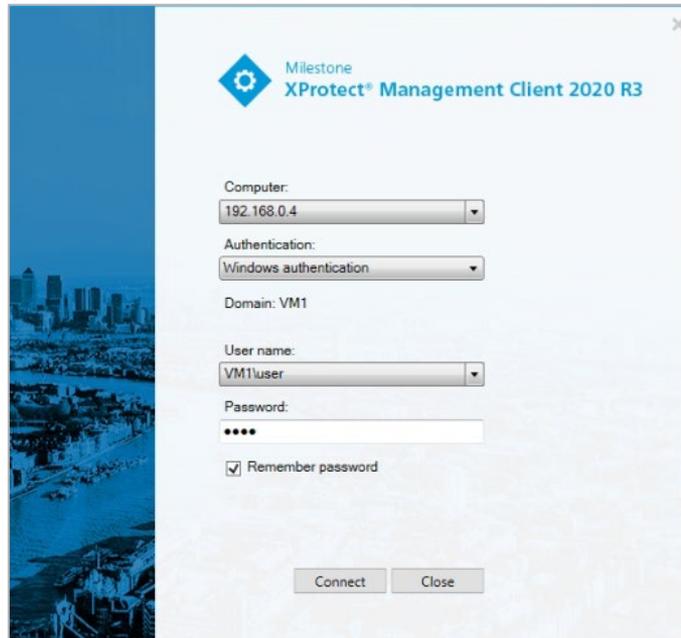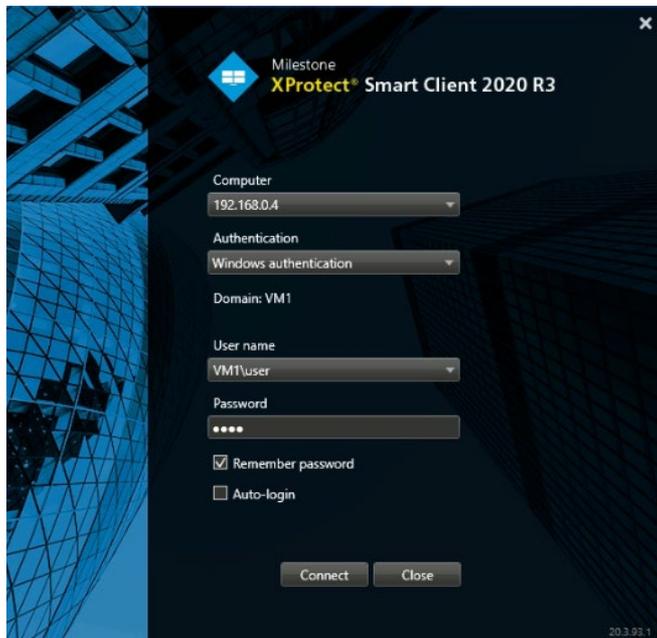(2) The video search function.

Preparation - Topology, flow and components

Camera video stream to be analyzed

Camera video stream to be recorded

Vaidio appliance or cloud service

Analytics alerts

Vaidio Search & Mgmt Plugin

Vaidio Alert Porter Plugin

Milestone Smart Client

Milestone Mgmt Server

VMS functions
Live view, search, playback, events, alarm

Check if the VMS server firewall is not blocking the port of Vaidio Porter

VMS analytics search result with meta-data

To synchronize the system it is required that camera, VMS and Vaidio service share "a common" NTP time server

Preparation - Milestone VMS & Vaidio

- Install Milestone XPCO or XPE in 2020R3 on x64 Windows 10 platform.
- Standalone or distributed Smart Client 2020R3 is tested with Vaidio v4.2.1.
- Both Vaidio and VMS need to have access to the camera stream.

Installation guide

Vaidio Search & Mgmt Plugin

A video analytics plugin for Milestone VMS and Smart Client. This plugin addresses two functions:
(1) The discovery & management of video analytic services (Vaidio) embedded in smart client.
(2) The video search function.

Installation & Verification

1. A base Milestone VMS installation on XPCO or XPE platform in Windows 10 w/ x64. Tested in version 2020R3 20.3a (64 bits)
2. Download the plugin from the <u>download link</u> and copy it in the **smart client** folder on the client PC. You have the option to click "cancel" or "next" in the installation process. Installation folder and Milestone smart client folders are fixed and cannot be redirected.
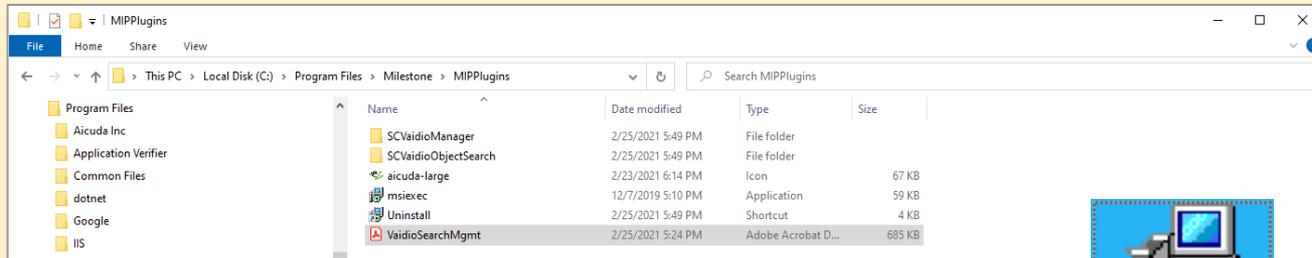

1. Launch the downloaded installer
   "VaidioSearchMilestonePluginInstaller-x.x.x.x.exe"
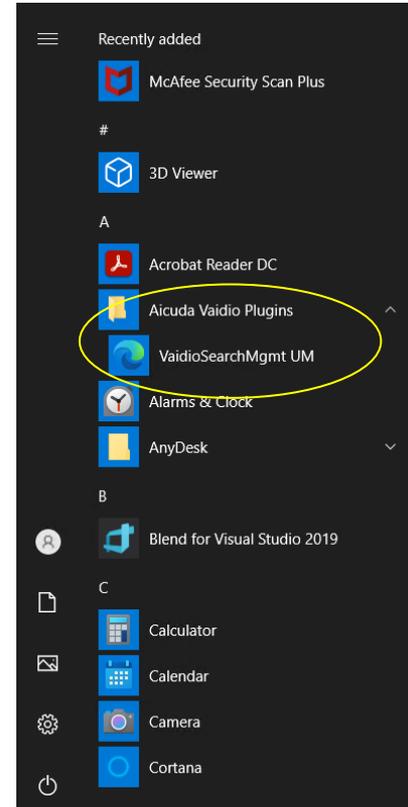
Plugin Verification
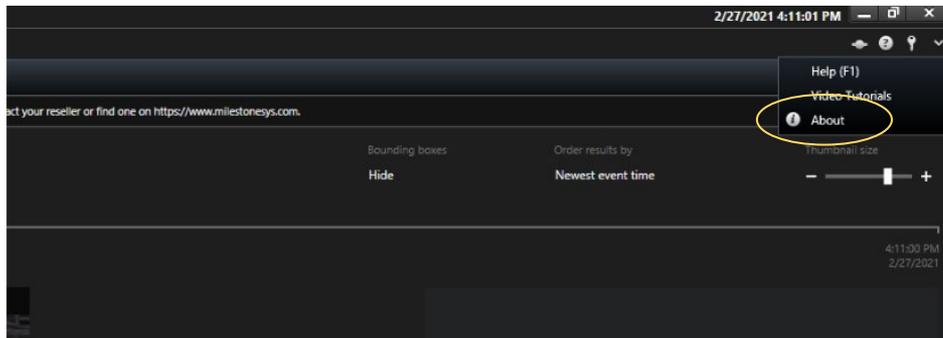
** To verify if the plugin is properly loaded in the Milestone Smart Client.

a. Run Smart Client and check "About" section.

b. Check if "Vaidio Manager vx.x.x.x" is listed.

c. Check if "Vaidio Search vx.x.x.x" is listed. vx.x.x.x is a placeholder for the version number.
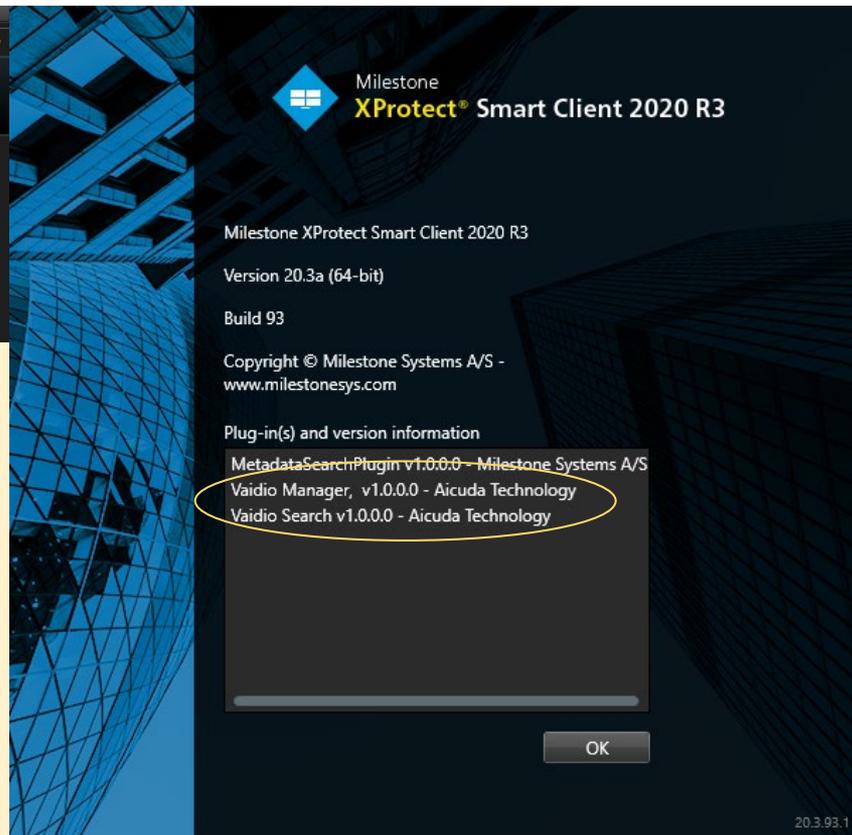
PlugIn removal

To uninstall the *VaidioSearchMgmt* plugin, open the programs in controller panel to remove the plugin. There is no option but remove directly.

Manual

Vaidio Search & Mgmt Plugin

A video analytics plugin for Milestone VMS and Smart Client. This plugin addresses two functions:
(1) The discovery & management of video analytic services (Vaidio) embedded in smart client.
(2) The video search function.

Vaidio Manager - Management Page
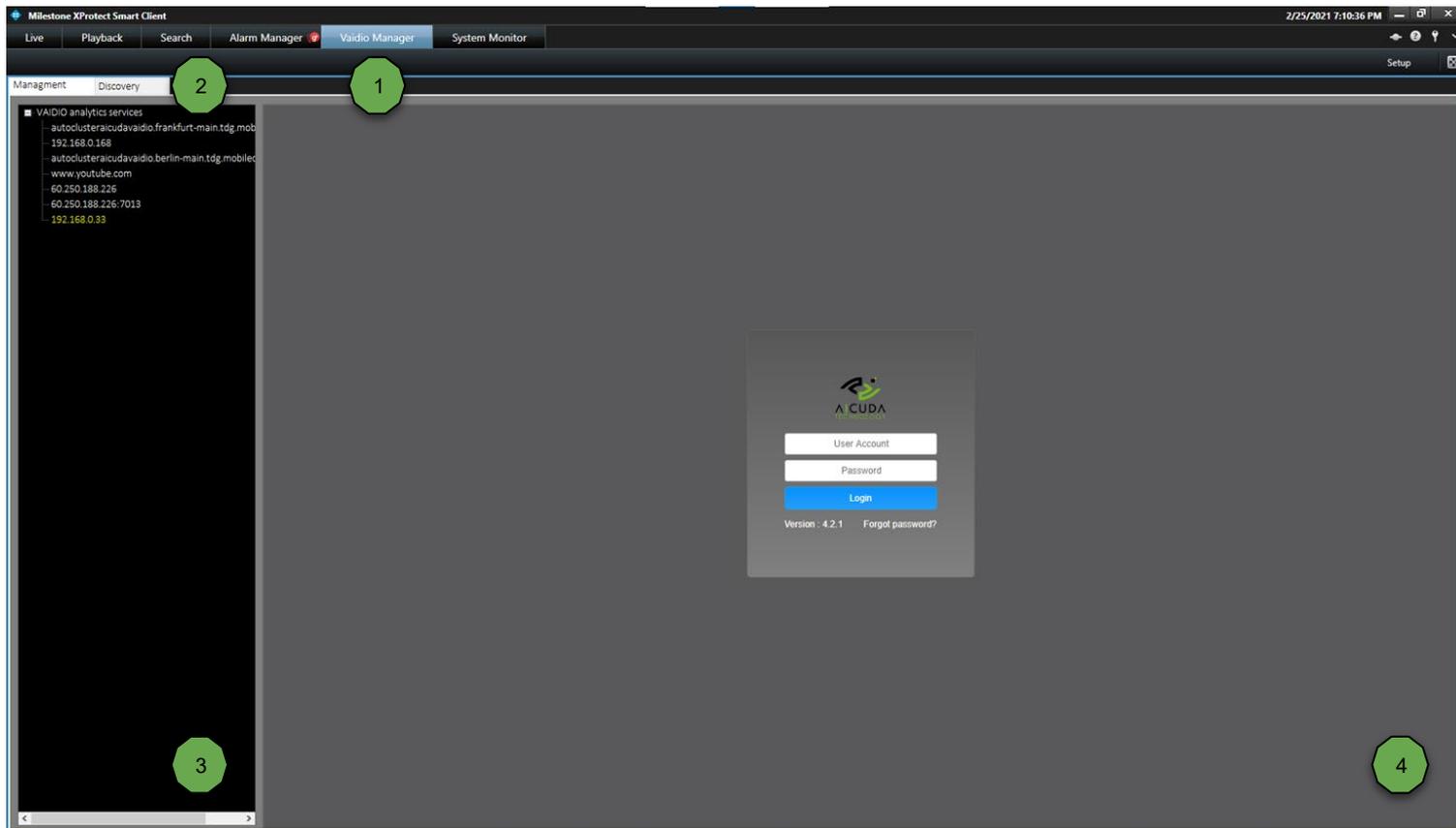
Vaidio Manager tab - For Vaidio discover and Management. **1**

Discover/Management tab - Switch to Discovery page or Management page **2**

List of Discovered Vaidio - Click on the Vaidio to manage in GUI view. **3**

GUI - Vaidio Web GUI. **4**

Vaidio Manager - Discovery Page
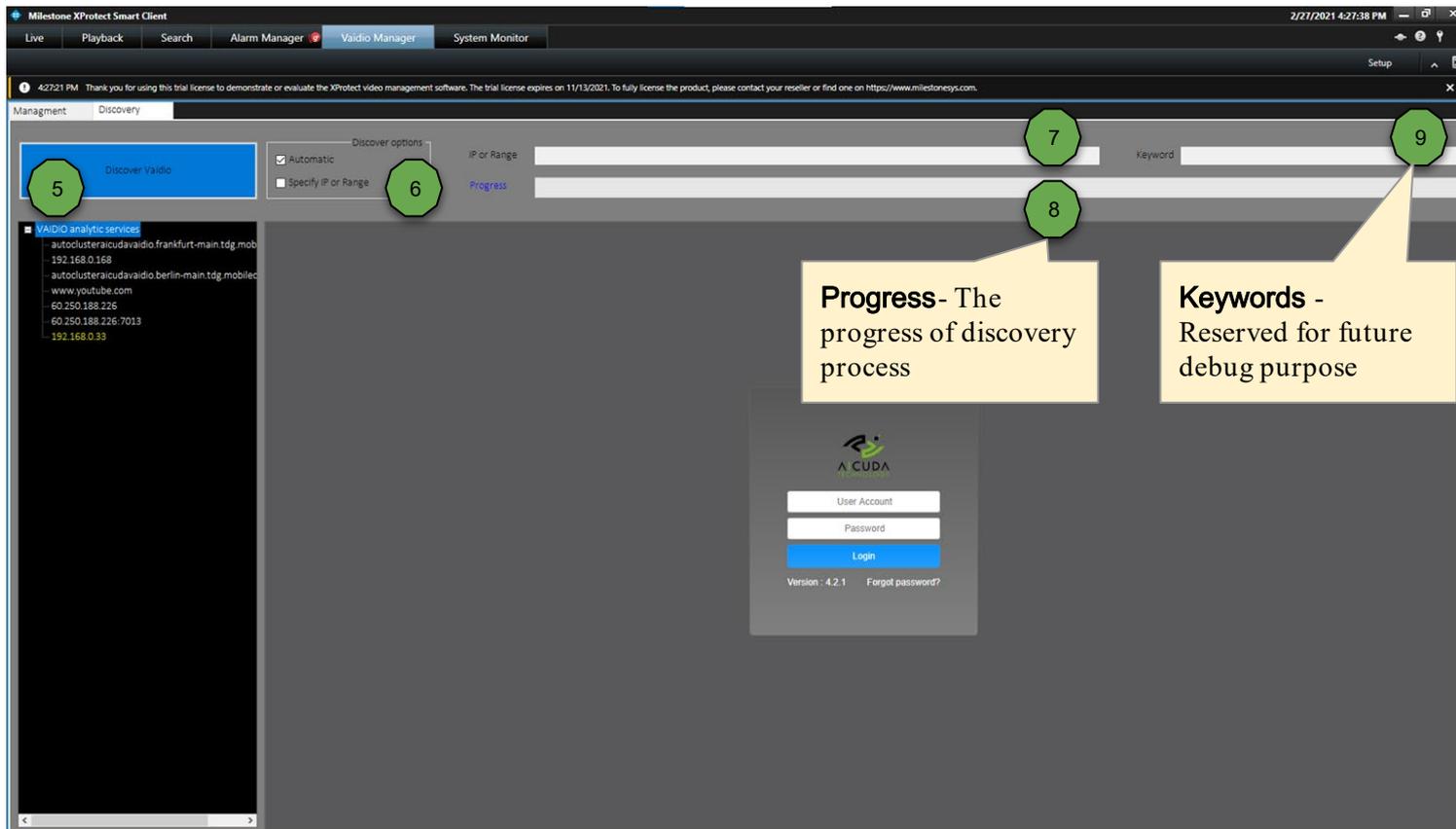
Discover Button- Press to Discover or add Vaidio Service with options specified in (6)

⑤

Discover options- **Automatically:** this option to automatically discover the Vaidio in a Lan.
Specify IP or Range: Add specific URL/IP to the Vaidio list or discover the specified range.

⑥

IP or Range Field- Input text of URL to "ADD" or IP Range to Discover.

⑦

Progress- The progress of discovery process

⑧

Keywords - Reserved for future debug purpose

Vaidio Manager - Discover Automatically

Press the "Discover" button to scan the Vaidio services with default "Automatic" option. The scan scope in a Lan.

The progress bar will last to reflect the scan process until the scan compete or use press the "Stop" button.

Vaidio Manager - Discover Automatically

Once the scan is done. There is a message box shows up to deliver the discovery process completeness.

Once user hit the OK button of message box, the scan result of listed Vaidio services will be listed in the tree view.

Vaidio Manager - Add URL / Host IP

Check the "Specify IP or Range", then click the discover button.

By input the explicit URL in the IP or Range text box. The legal format of URL will be added in the the tree view. The added URL/Host may not be able to connect if the network connection or service is not there.
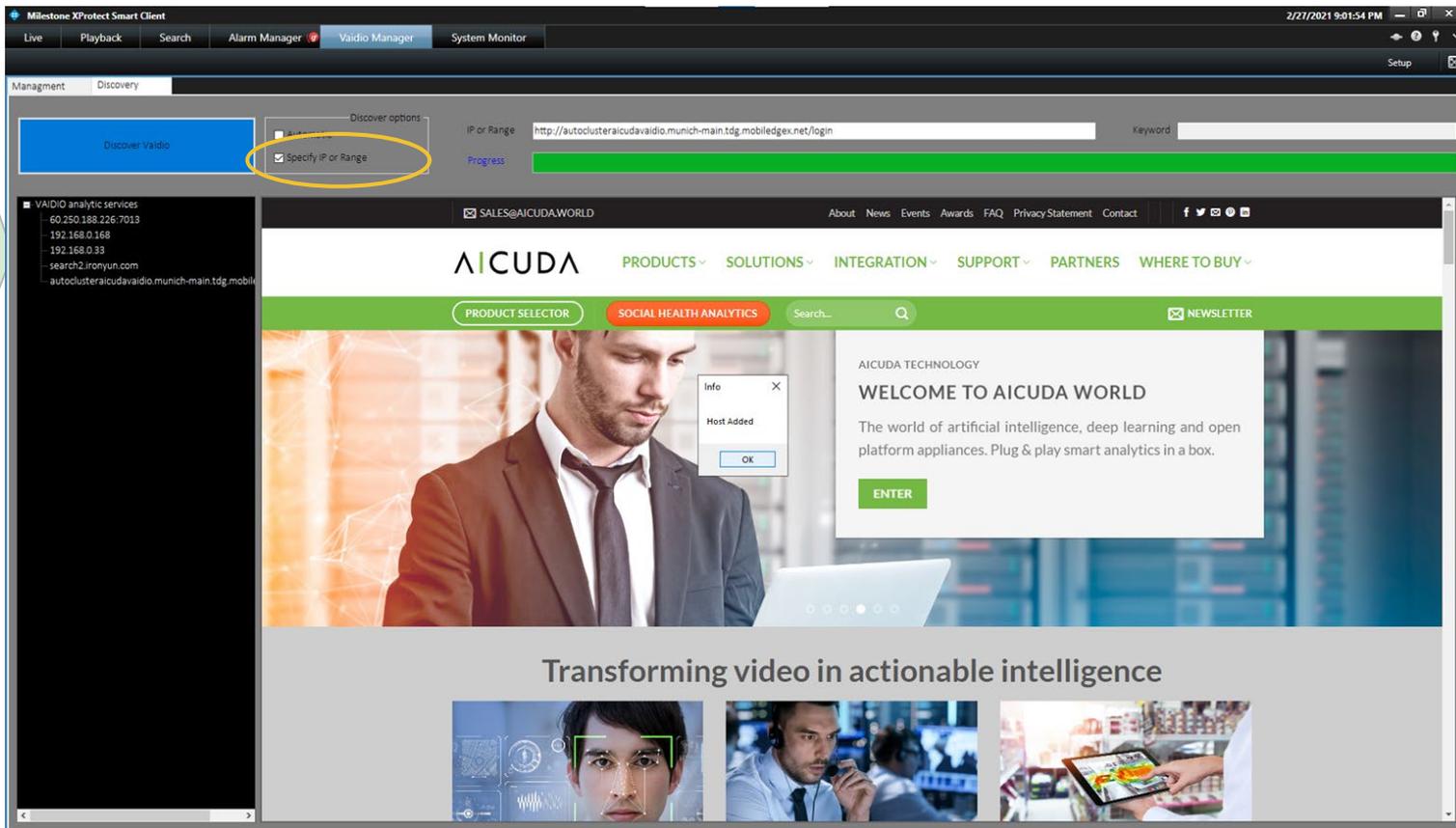
Vaidio Manager - Discover IP Range

Check the "Specify IP or Range", then click the discover button.

By input the IP and the netmask to specify the range to scan to reduce the time of discovery. In the example of picture the range is determined by the netmask. The actual scan range is
192.168.0.1 ~ 192.168.0.127

Vaidio Manager - Remove Vaidio from list

Right click on the Vaidio entry in list. Chose the delete ite to delete the Vaidio service from the list.

** The IP in the list will be automatically removed from list in case the automatic scan can not find unless it is a selected service or the user input vaidio explicitly via "specify IP range".

Vaidio Manager   - Specify Vaidio for Search

Right click on the Vaidio entry in list. Choose the select item. One Vaidio can be selected at a time. The selected Vaidio play the role of delivering analytic search result to SmartClient search function.

The default credential will be set unless user click the credential item to change the credential
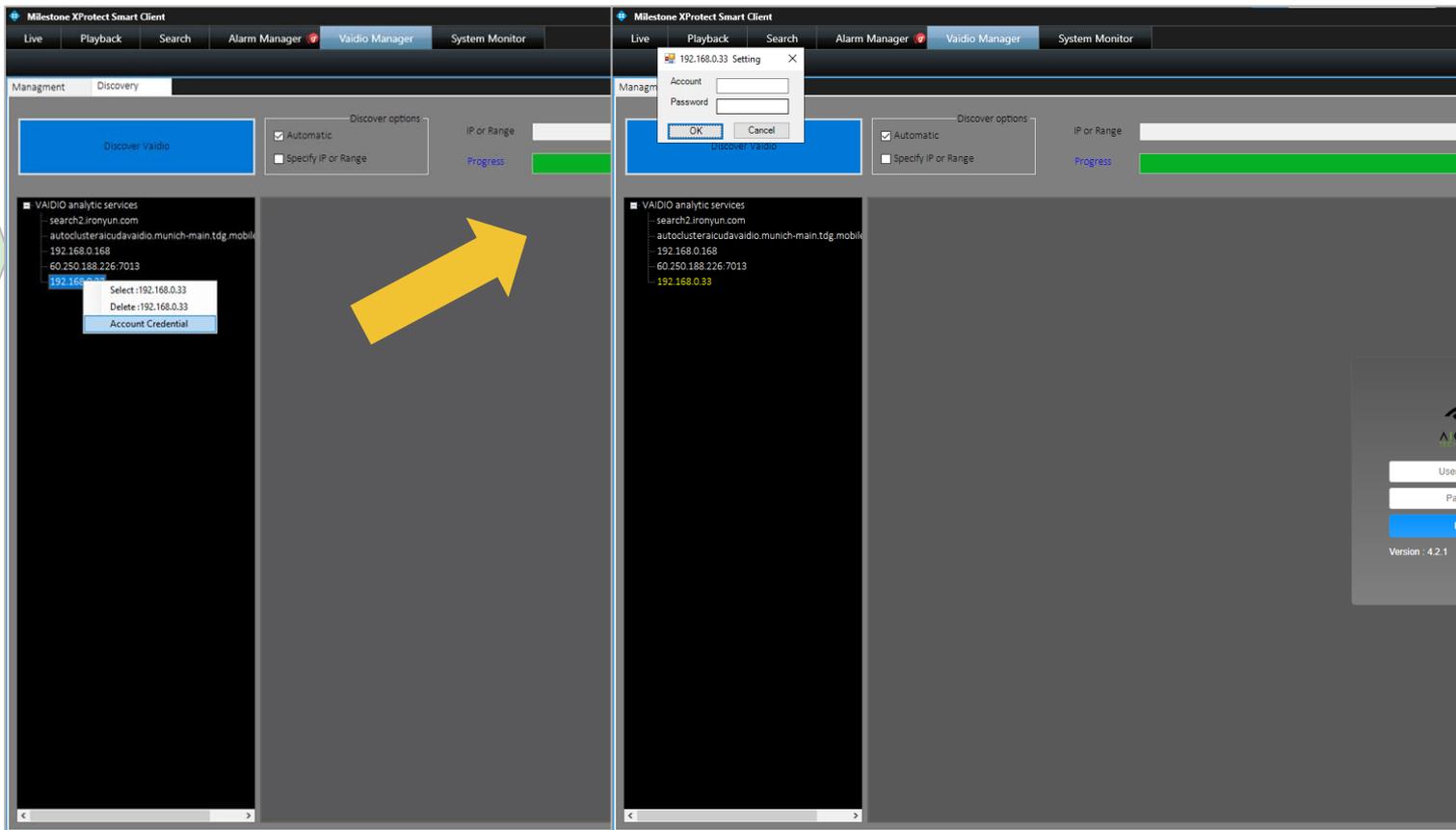
The selected Vaidio is colored in yellow for differentiation. .
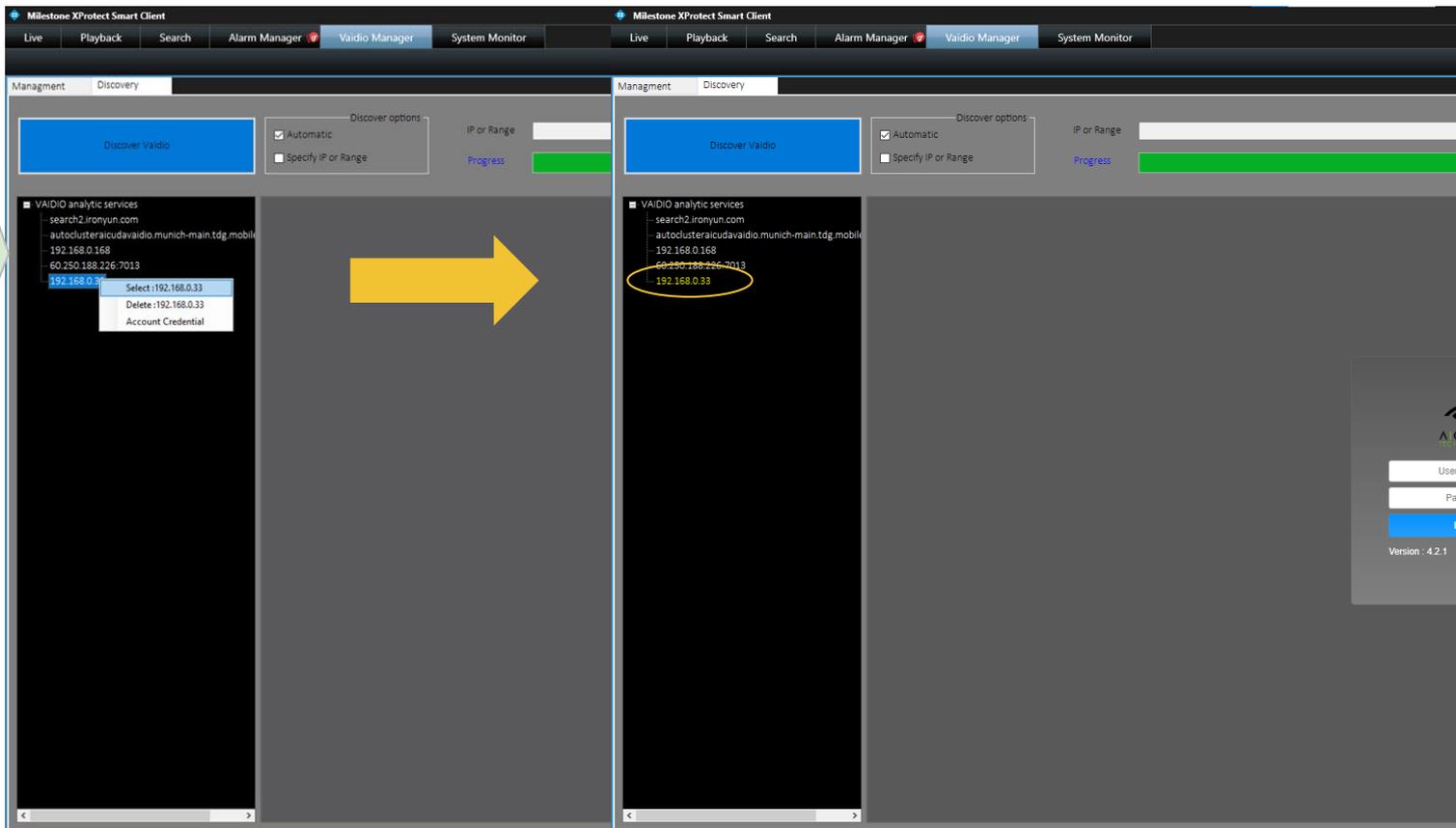
Vaidio Manager - Credential for Vaidio

Right click on the Vaidio entry in list. Chose the "Account credential" item.

The pop up input window is for user to input the access credential for the selected Vaidio.
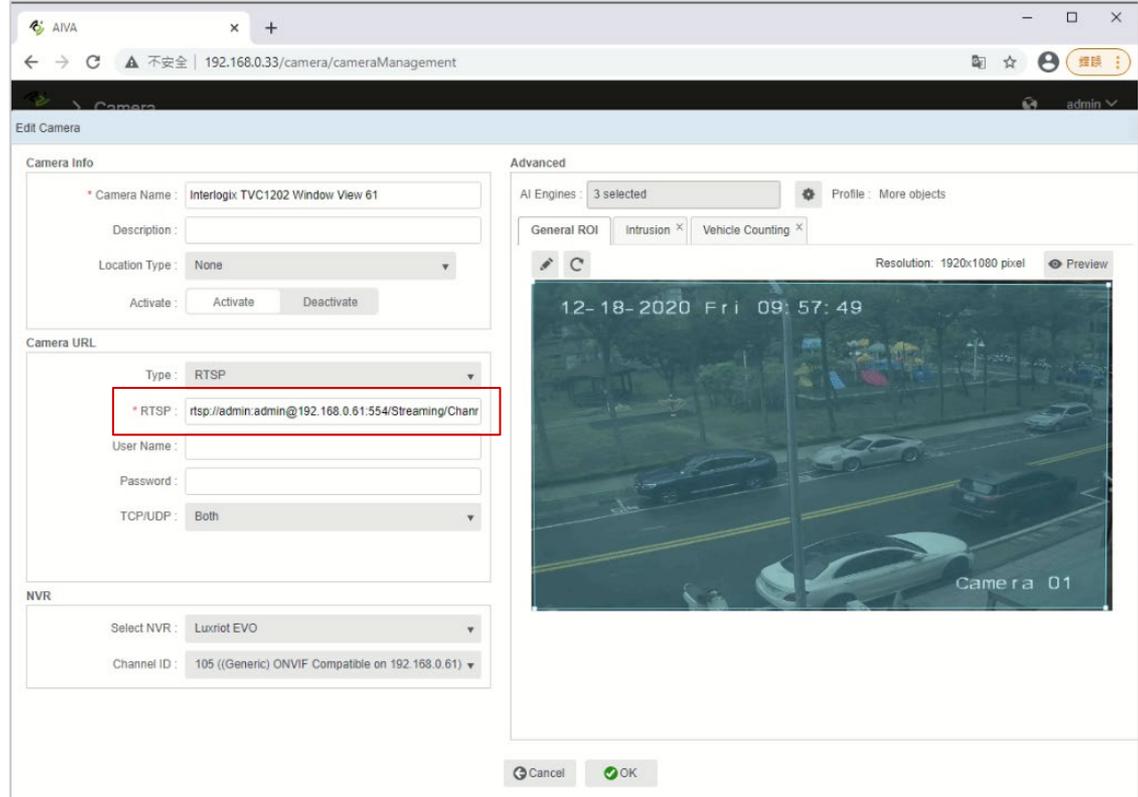
Vaidio Search - Camera match

Camera for analytic and recording will be mapped automatically as long as the camera can be both visible by Milestone and Vaidio.

1. Add camera in milestone management client
2. Add camera in Vaidio

Vaidio Search - Camera match
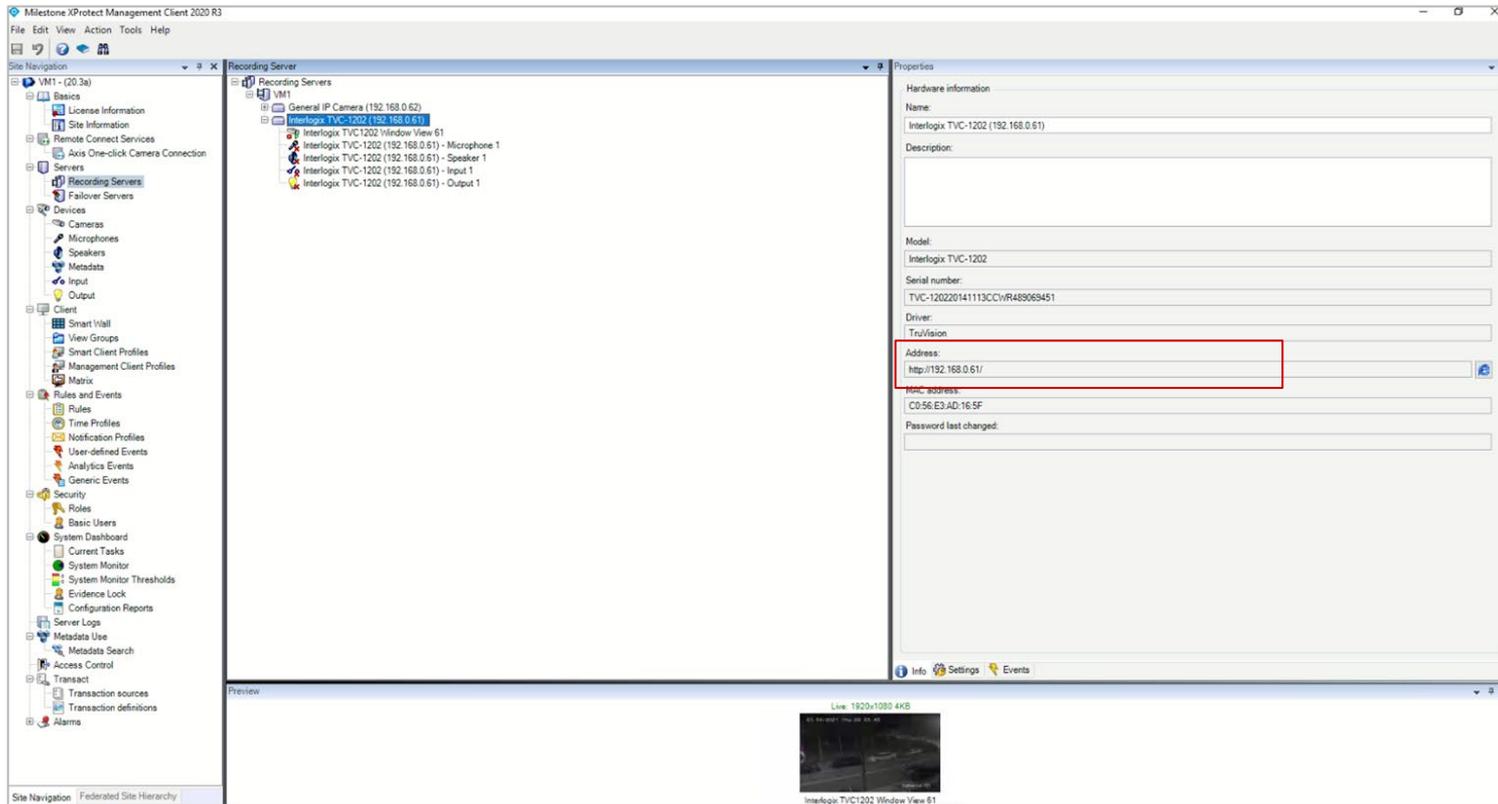
The mapping base on IP / Domain of camera to manage the association in between management client and Vaidio.

Please avoid the duplicated camera IP / Domain in Vaidio / Recording Server for possible redundant search result.

Vaidio Search - operation sequence

(1) In smart client search tab .

(2) Specify the range of time.
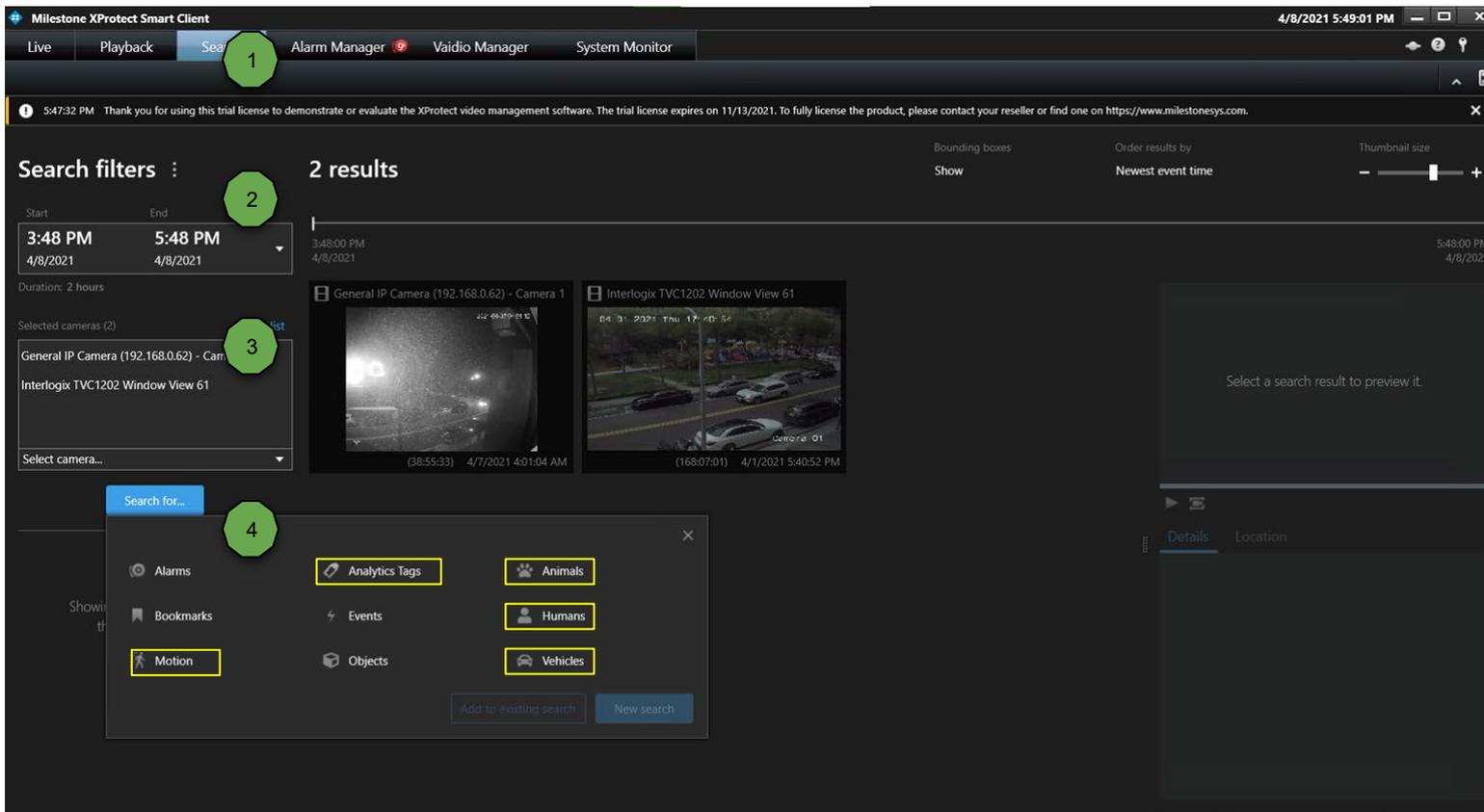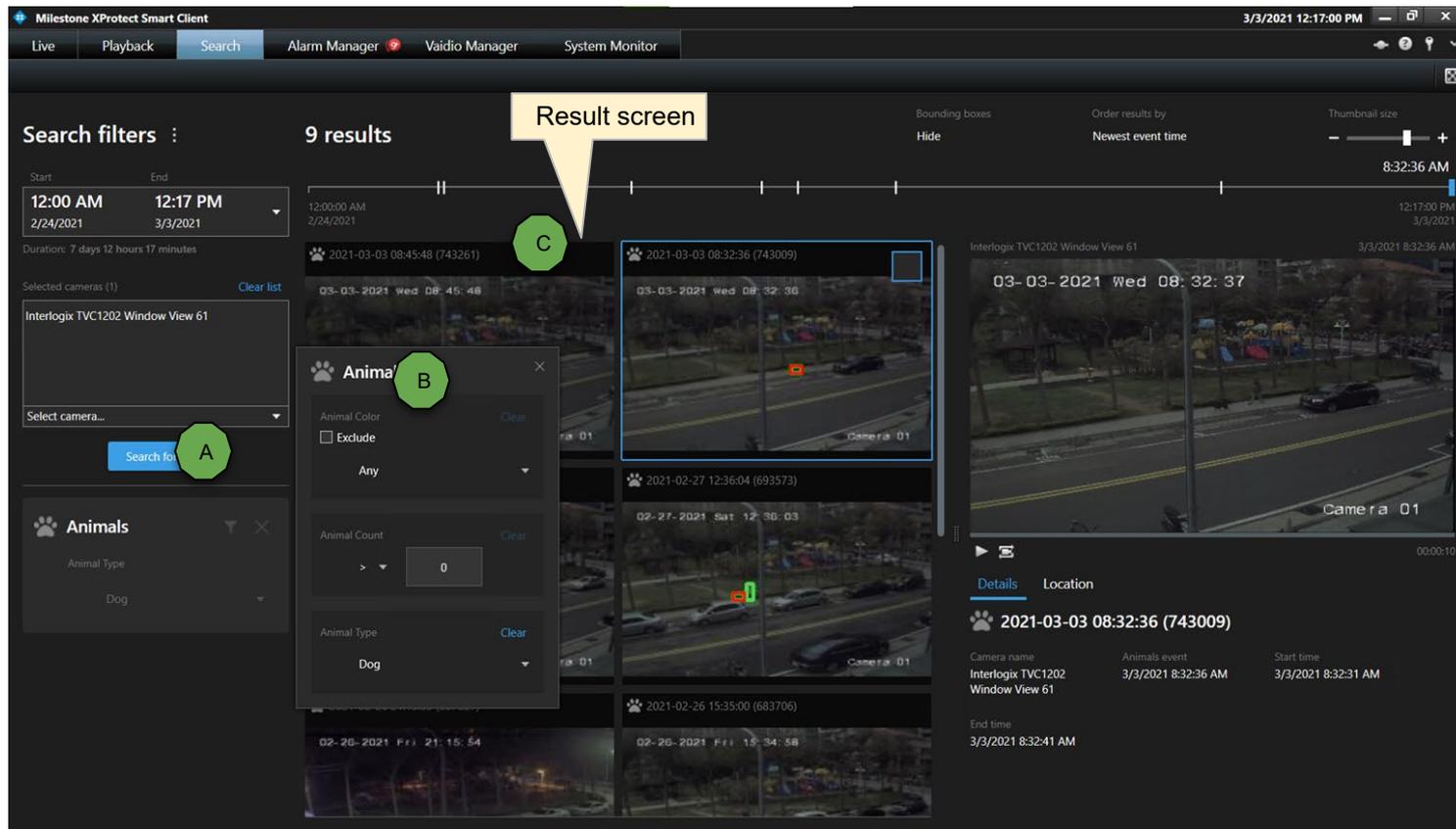
(3) Select the cameras to be search. (** Please note that the camera to be search also has to be added into Vaidio via Vaidio GUI. The camera mapping currently is matched by IP of rtsp.

(4) The vaido plugin added Human, Objects, Animals, Vehicles and Analytic Tag options.

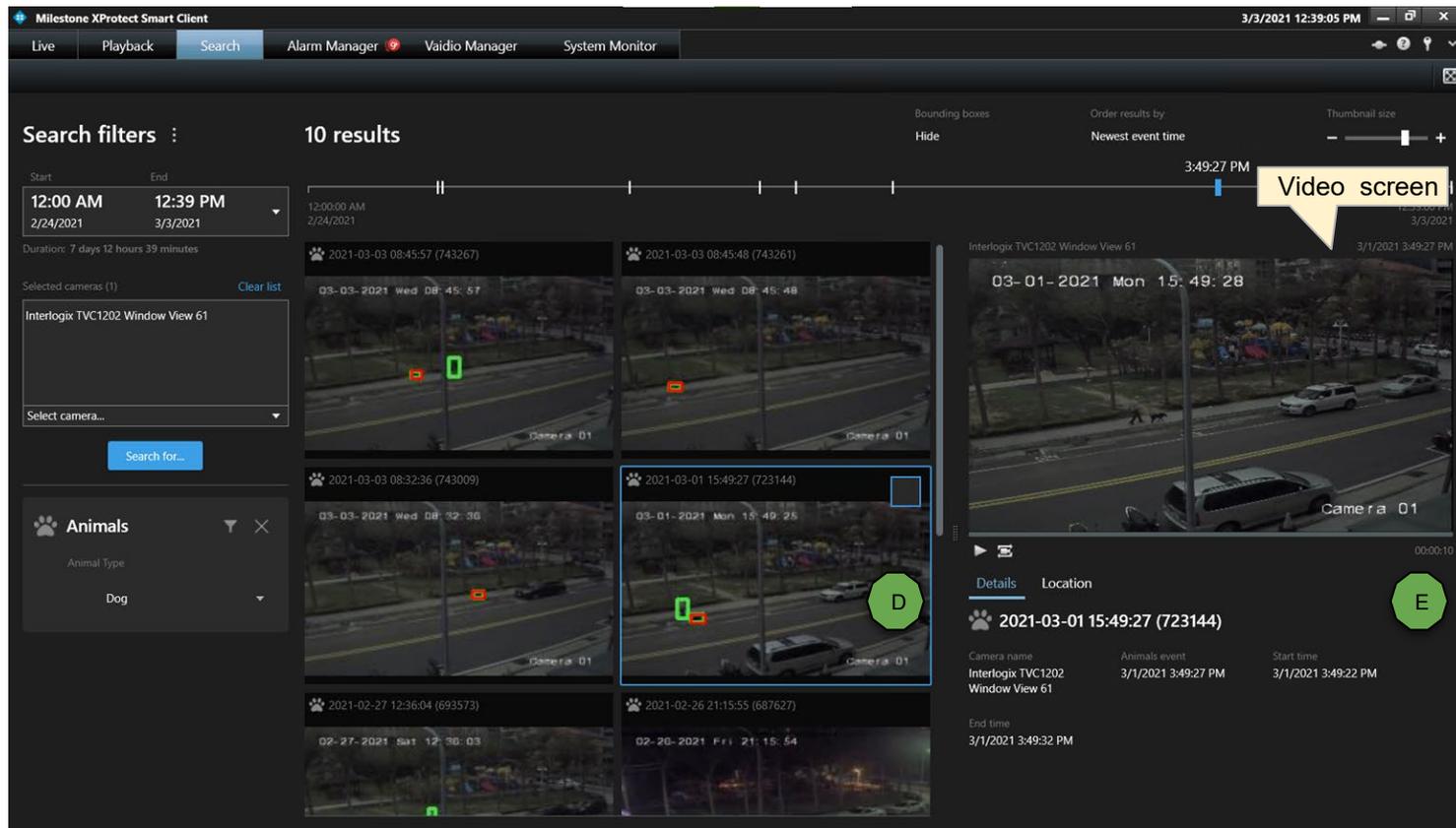# Vaidio Search - Search types & companion options

Result screen

From step (4) of search options.

(A) Click "Search for" button to choose Animals. The search options for Animal will pop-up.

(B) Specify the color, quantity and Animal type for a search.

(C) System will automatically show search result in the result screen the screen bounding box in color Red is the target animal where the color yellow is the major object highlight.

Vaidio Search - The video detail to search result

From step (4) of search options.

(D) Click the selected search result like to be magnified to watch

(E) The corresponding video footage will show up in the video screen.

(F) Click the video screen to see the magnified screen of the video at the time event detected. Double click on the magnified screen will recover back to a standard view.
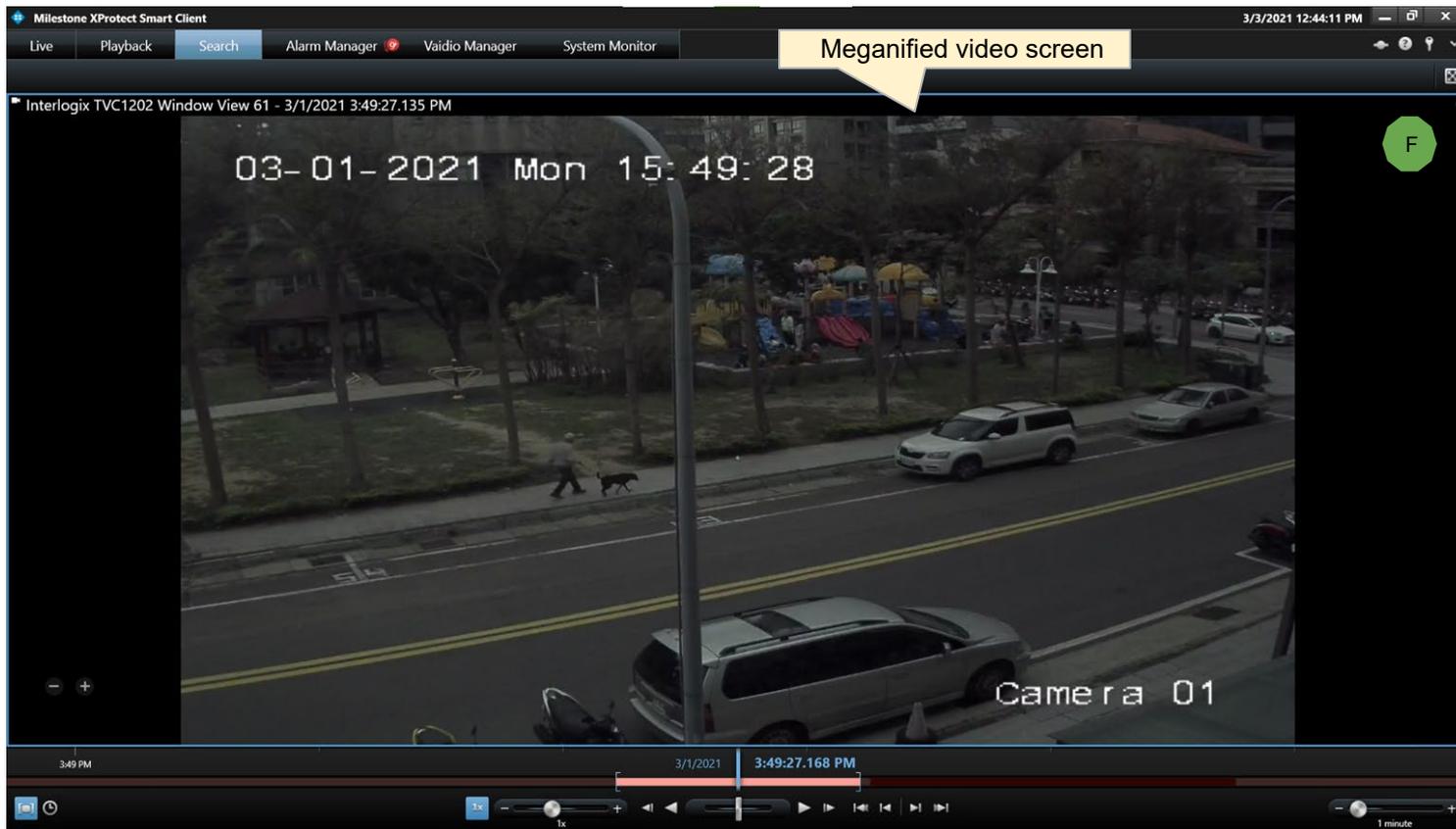
# Vaidio Search - The video search magnified

From step (4) of search options.

(D) Click the selected search result like to be magnified to watch

(E) The corresponding video footage will show up in the video screen.

(F) Click the video screen to see the magnified screen of the video at the time event detected with video operations. Double click on the magnified screen will recover back to a standard view.

Video search - Animals & Objects
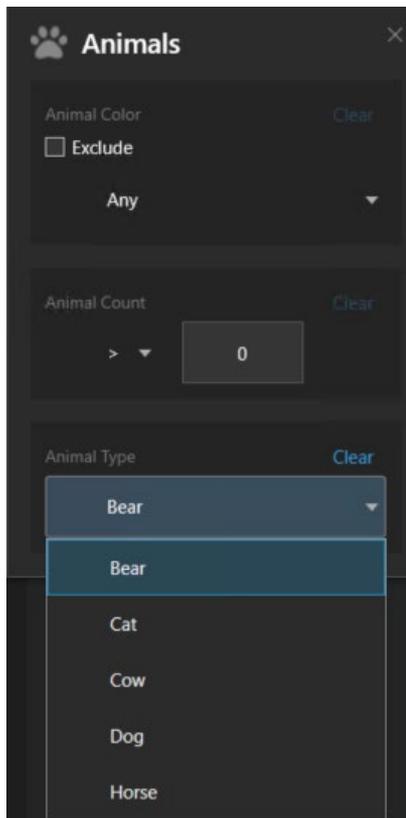
1. **Color:** Specify the color to the animal to be search with checkbox of **Exclude** option.
2. Count : Specify the quantify conditions to be search for animal.
3. **Type**: types of Vaidio recognizable animals to be detected.

** Bear, Cat, Cow, Dog and Horse in default options. More types please contact IronYun/Aicuda sales.
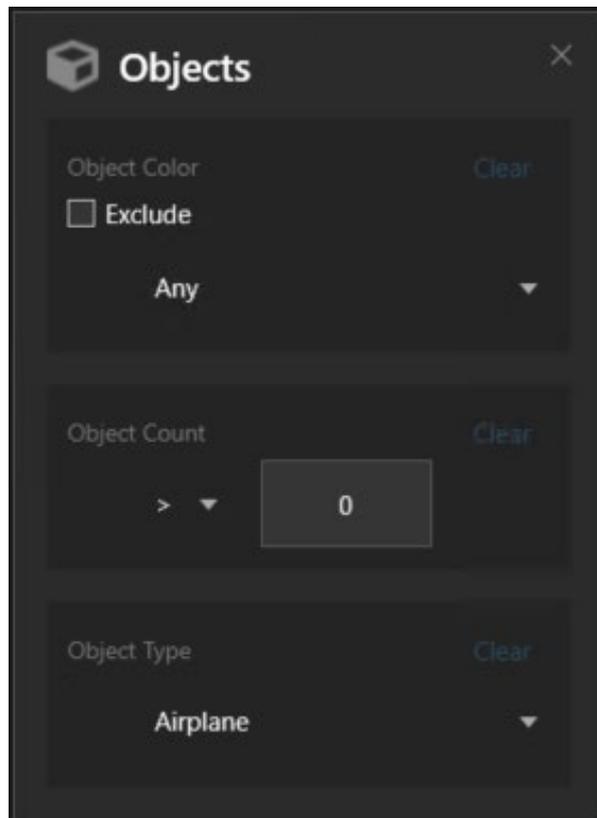
1. **Color:** Specify the color to the objects to be search with checkbox of **Exclude** option.
2. Count : Specify the quantify conditions to be search for objects.
3. **Type**: types of Vaidio recognizable objects to be detect.

**It is default 22 listed objects for detection. More object types please contact IronYun/Aicuda sales.

Video search - Human & Vehicles
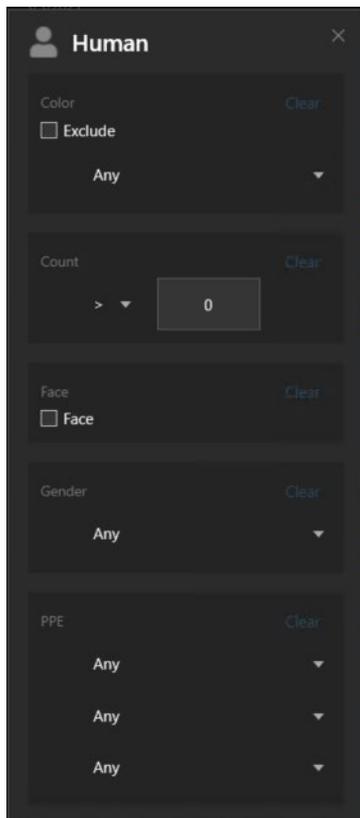
1. **Color:** Specify the wear color to the people to be search .
2. **Count** : Specify the quantify conditions to be search for people.
3. **Face** Search the people with face. Where the face need to be at least 40 pixels in width & length.
4. **Gender**: for male/female search condition.
5. **PPE** Personal Protection Equipment to search with wearing or no wearing

** To do face recognition is not supported in plugin yet. Please contact Aicuda/IronYun sales for supports.
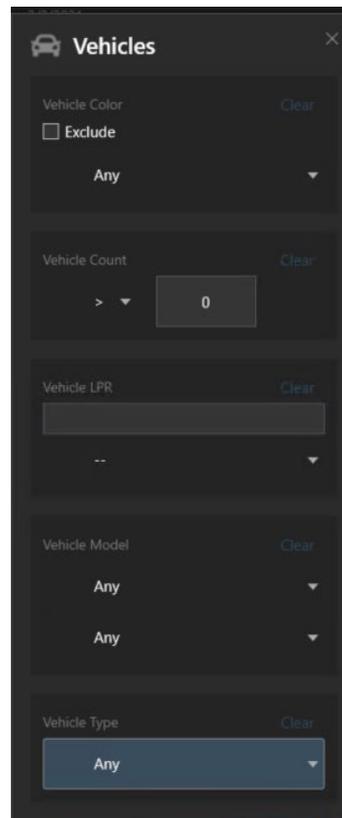
1. **Color:** Specify the wear color to the vehicle to be search .
2. **Count** : Specify the quantify conditions to be search for vehicle.
3. **Vehicle LPR** Search with the specified LPR # or from a pre-created list (**created via Vaidio GUI)
4. **Vehicle Model:** Specify the make and model to search.
5. **Vehicle type:** Choose specific type of vehicle to search.

Video search - Analytic Tag
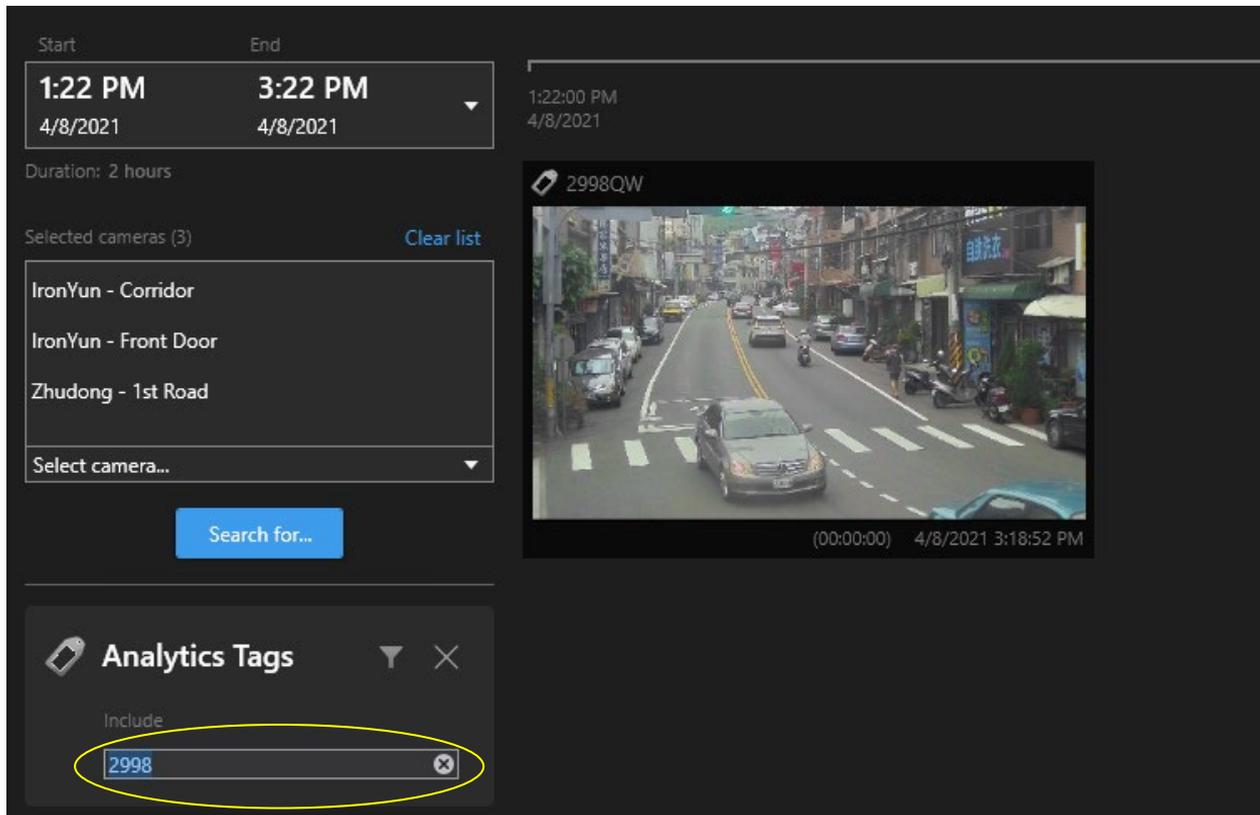
Include :Specify the keyword of the analytic tags to be search that sent along with Vaidio tag either in placeholder or in plaintext.

This example shows the LPR number 2998 search from Vaidio.

Where the number comes in the placeholder of {LicensePlate} as example below

Alert Deliver to Milestone Alarm examples:
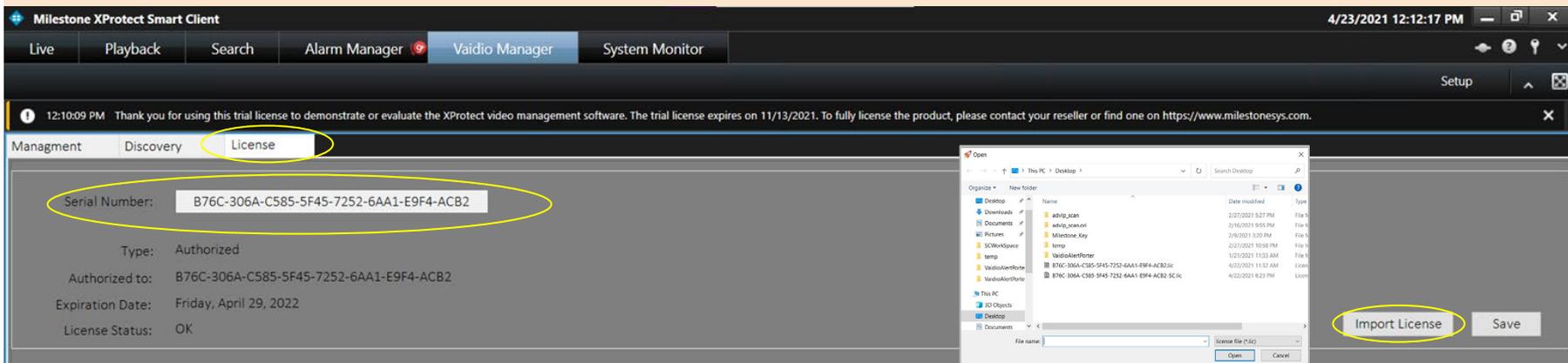http://192.168.0.47:2234/v1/alerts/AicudaDetectionToyota?cn={cameraName}&t={eventTimeStamp}&tag={LicensePlate}

Alert Porter   - License

Three level of license

- **Free / Limited:** limited function after installed no expiration. Only 5 results in human search can be delivered.
- **Trial:** limited time with full function after customer applied to sales. The purpose for trial license is for customer evaluate before go full function. Normally a 30 days starting from sending trial license. There is no function limited.
- **Paid:** full function, unlimited time.

License Status OK / Expired / Not Match / InValid / Not Match Product (Plugin Product mismatch)

** User choose the license tab to open the license dialog from "import license" button, copy the content of serial number and send back for Aicuda sales for license file to apply. User use the same dialog windows to open the license file and apply after the license received.