

Video analytics system for cities  
and business

VEZHA



Video analytics system  
for cities and business

# **User Guide**

## **Gender Age**

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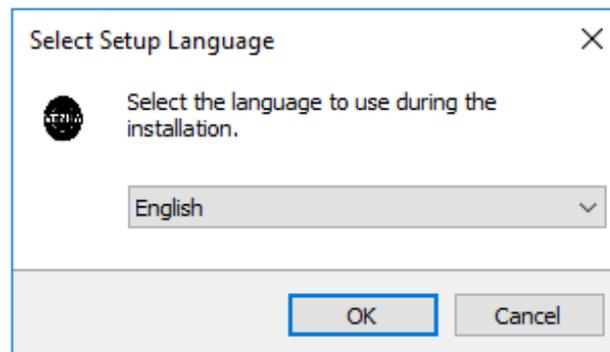
### Description of Gender/Age:

- Determines the gender of a person: male or female.
- Determines the age of a person in the age range.
- Generation of reports on gender and age with uploading to pdf, Excel.

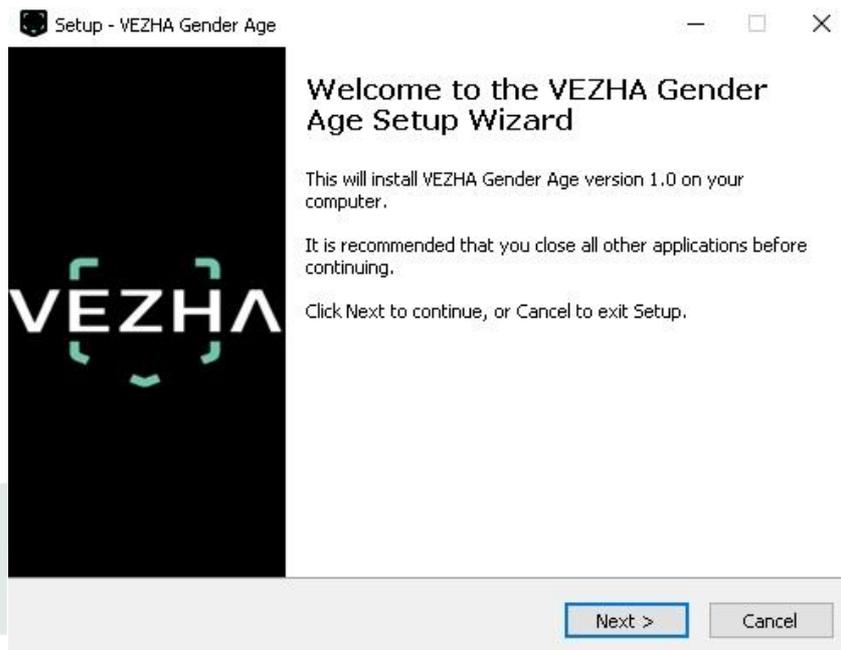
## 1. Installation

1) Launch the installer by double-clicking the downloaded file with the left mouse button **Vezha\_GenderAge\_Setup.exe**.

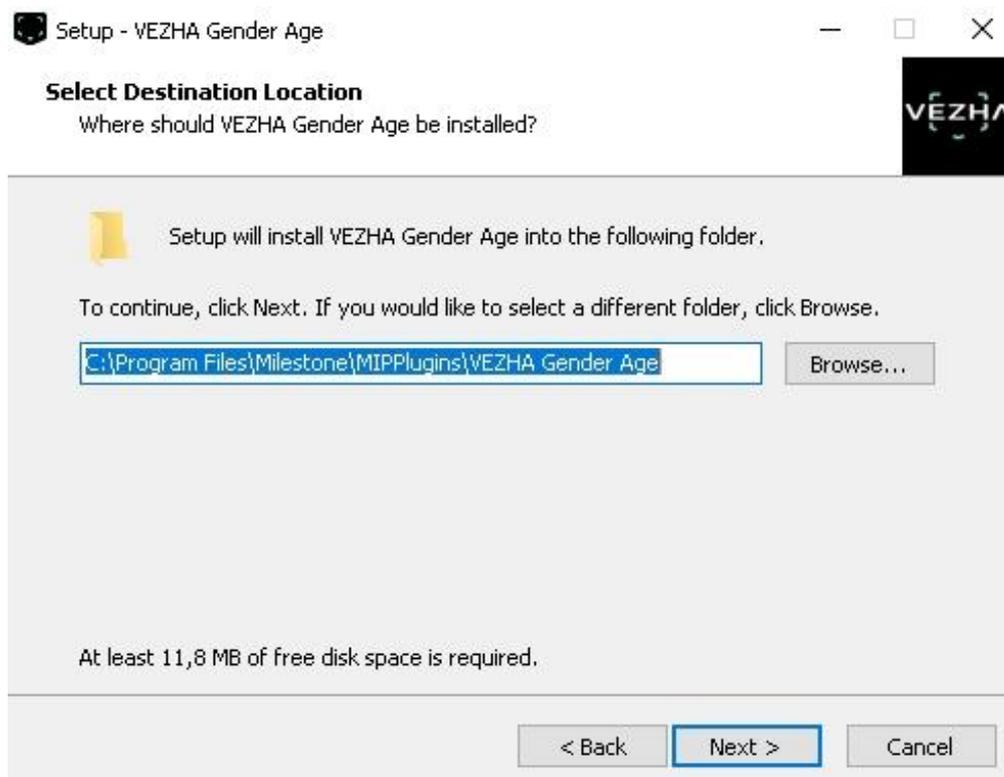
2) In the window that opens, select the language that will be used during the installation process. To go further, click **OK**. To abort the installation, click **Cancel**.



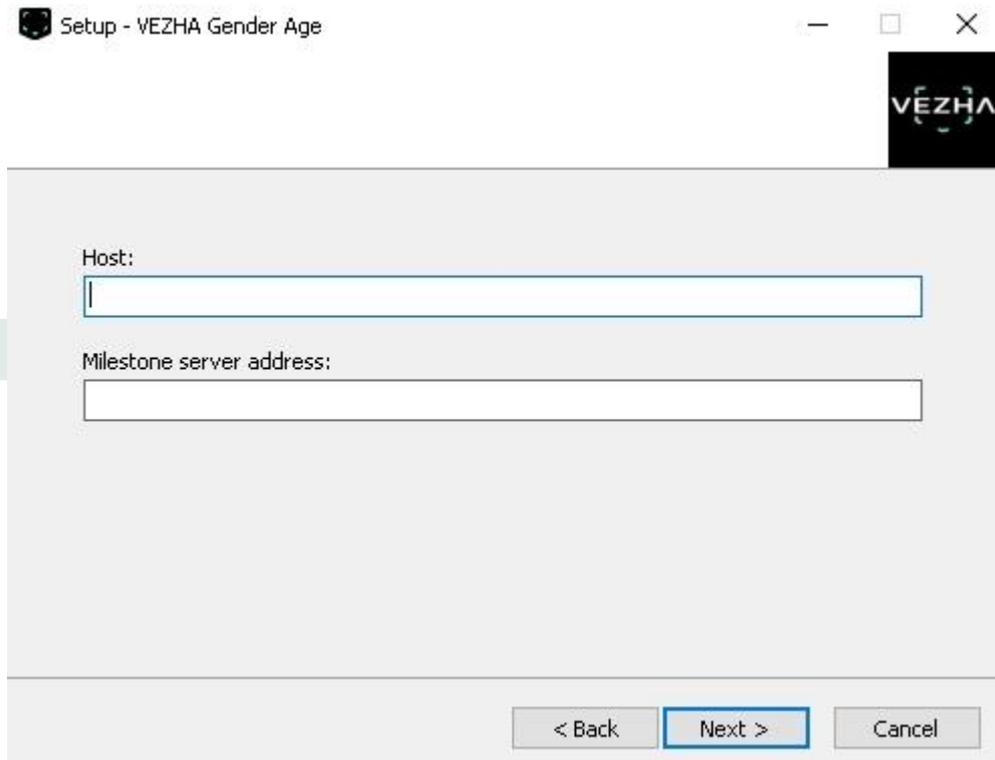
3) In a new window, read the installation recommendations and click **Next** to continue the installation, or the **Cancel** button to abort the installation.



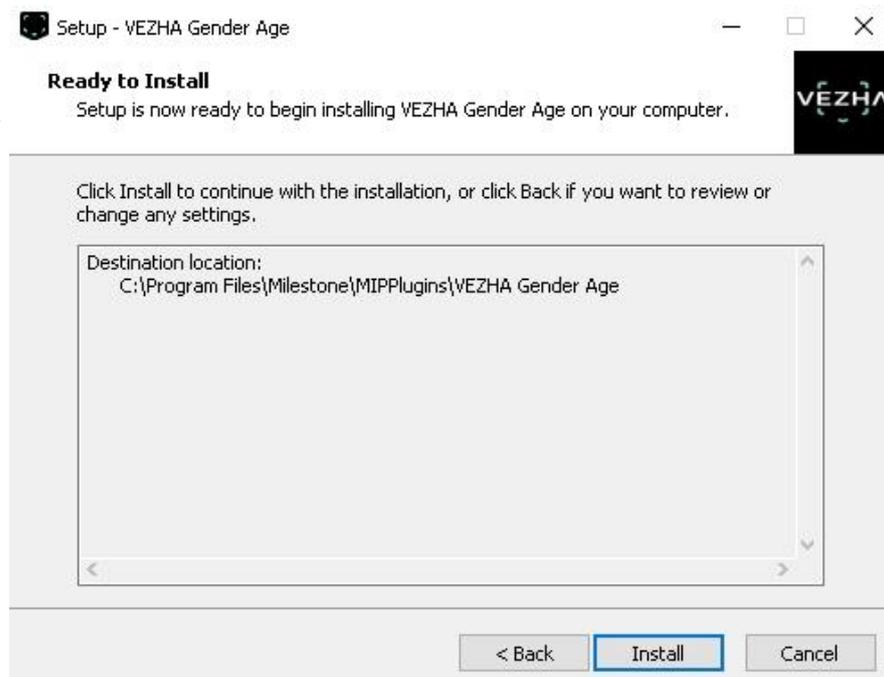
- 4) In the **Select Destination Location** window using the **Browse** button, specify the place where you want to install the plugin. The plugin must be installed in the **Milestone** folder with other plugins. After selecting the desired folder, click **Next** to continue the installation or **Cancel** to abort the installation.



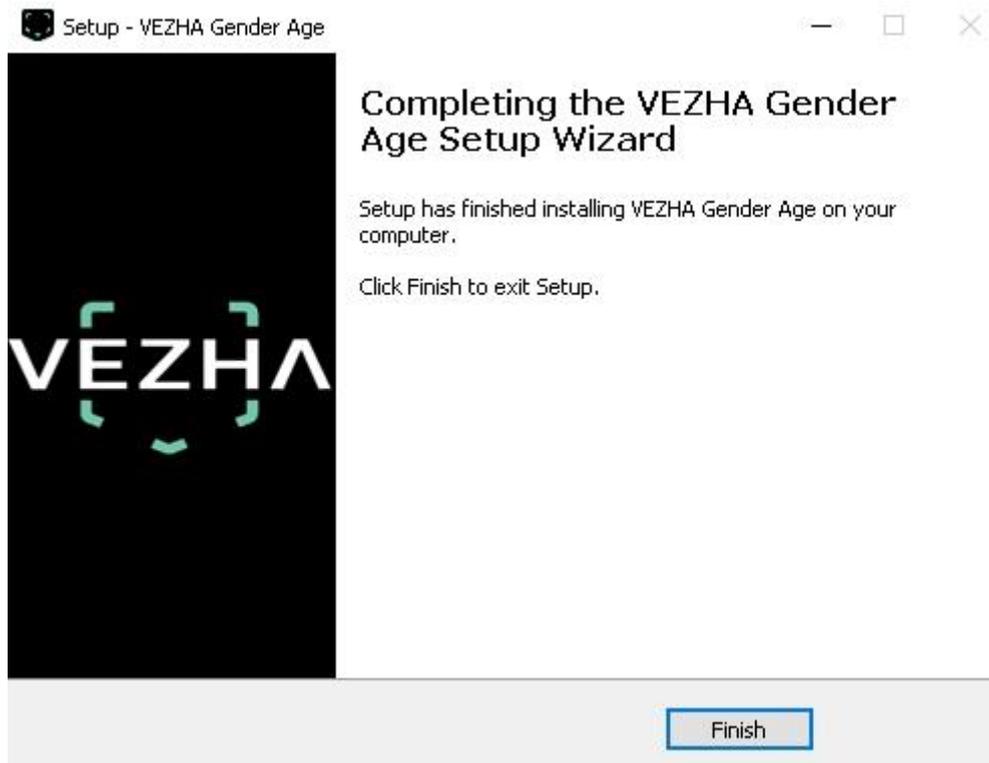
5) In this window, for correctly program work, you must correctly fill the fields and click **Next** to continue the installation or **Cancel** to abort the installation.



6) Click **Install** to start installation.

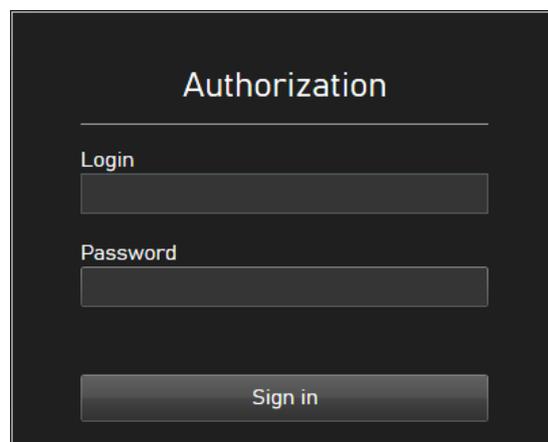


After the installation is completed, click **Finish**.



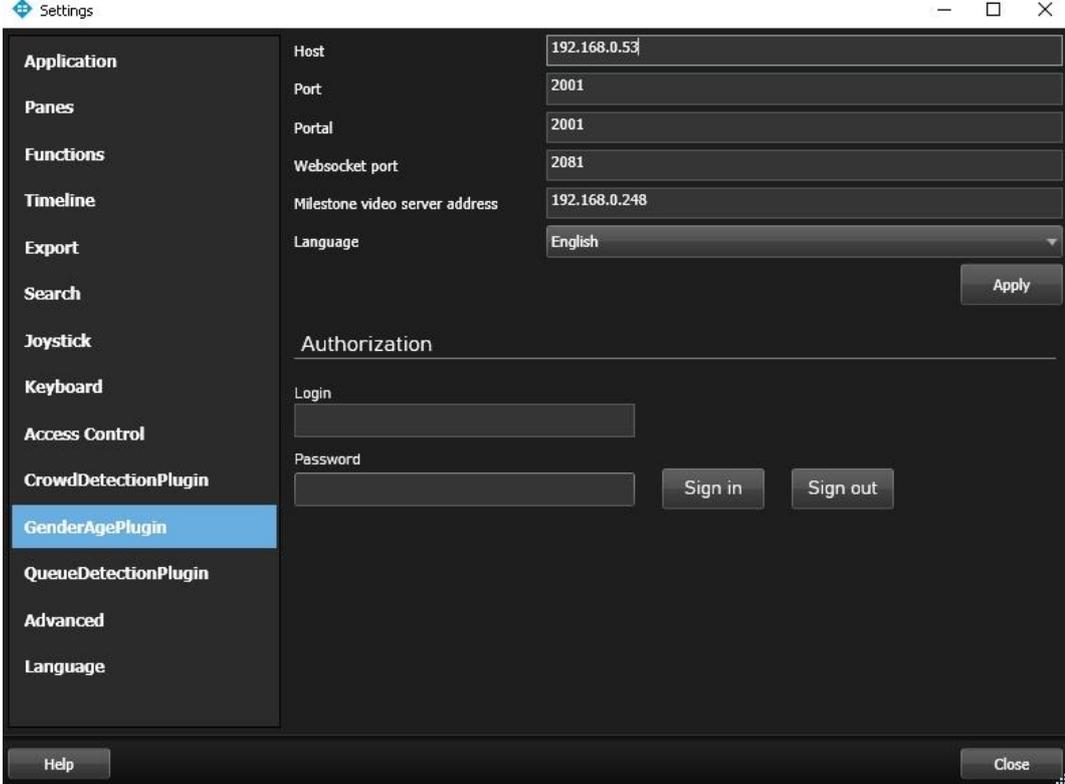
## 2. Log In

To enter the system you need to go through authorization. To do this, enter the **Username** and **Password** in the appropriate fields of the modal window and click **Login**.

A dark-themed modal window titled "Authorization". It features two input fields: "Login" and "Password". Below these fields is a "Sign in" button.

### 3. Settings

In order to open Gender/Age settings, click the icon  in the upper right corner of the screen. Select and click **Settings**. In the window that opens, select the **Gender Age Plugin** tab.



Host	192.168.0.53
Port	2001
Portal	2001
Websocket port	2081
Milestone video server address	192.168.0.248
Language	English

Authorization

Login:

Password:

Sign in Sign out

Apply

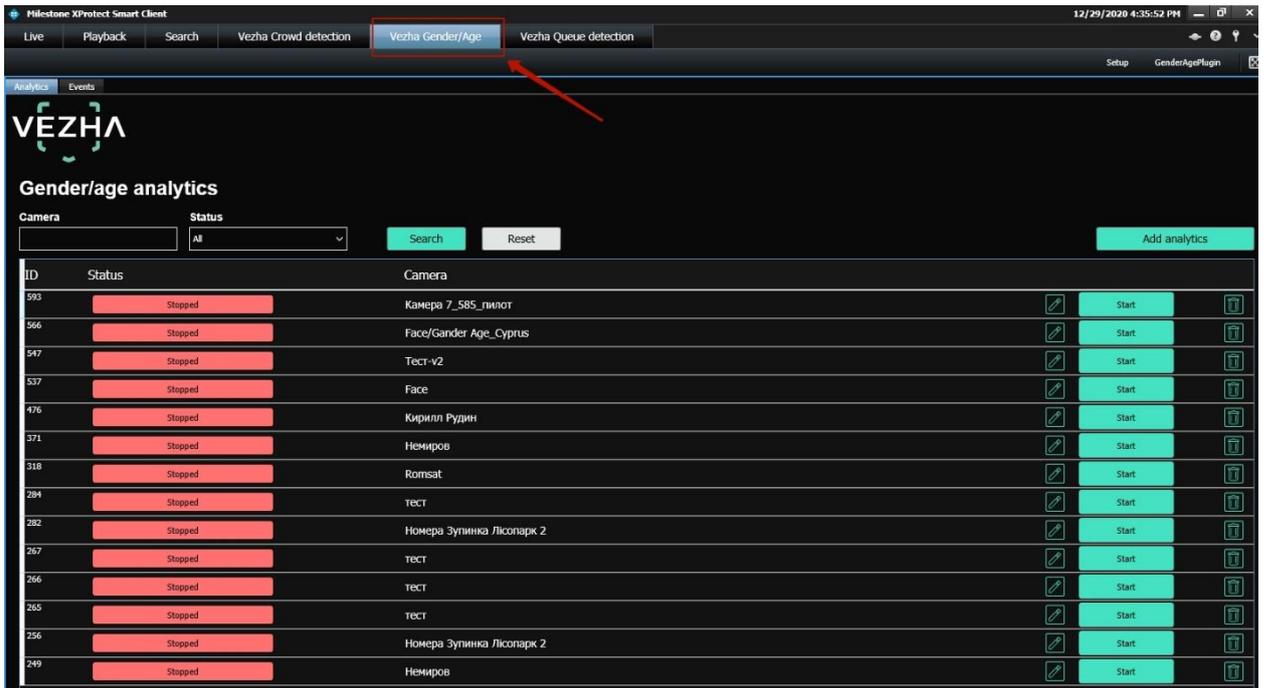
To change the server settings in the **VEZHA GENDER/AGE** tab, you can edit the following fields: **Host, Port, Portal, Websocket port, Milestone video server address**.

To change the language, use the **Language** field and select from the list the most convenient for you.

To make changes, click **Apply** and reload the plugin.

#### 1.1. Gender/Age Module - User's Guide.

To open this item, select **Gender/Age** in the top menu.



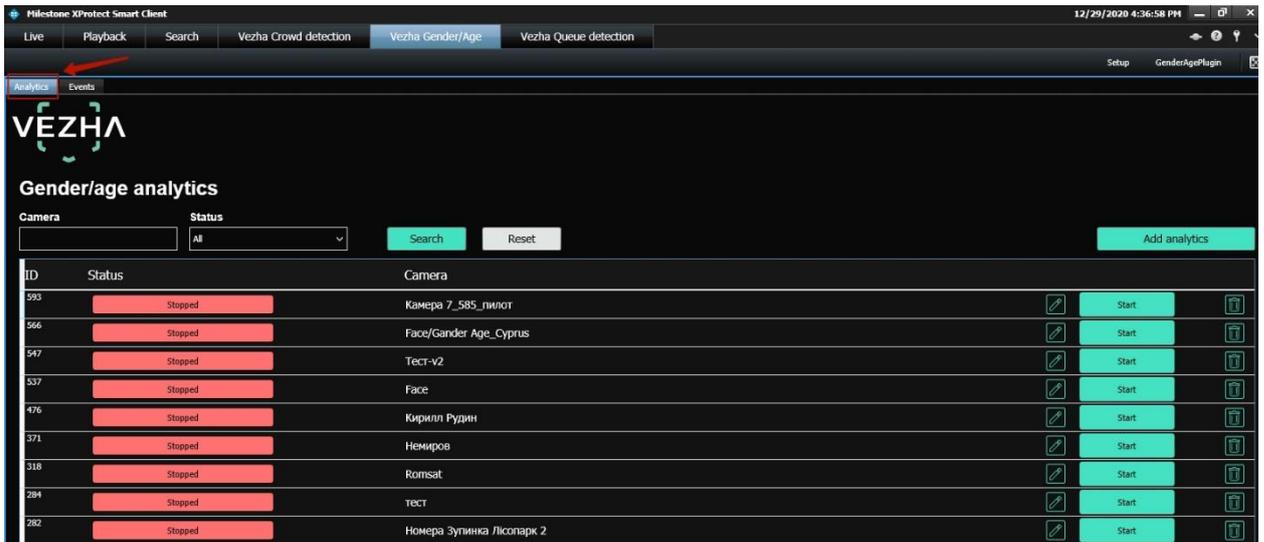
Gender/Age module consists of the following sections:

Section name	Description
<b>Analytics</b>	Section is intended for creating, editing, and control (enabling, disabling) analytics for determining the gender and age of people in the field of cameras view.
<b>Statistics</b>	This section is intended for viewing statistics of Gender/Age module

#### 4. Gender / Age - Analytics

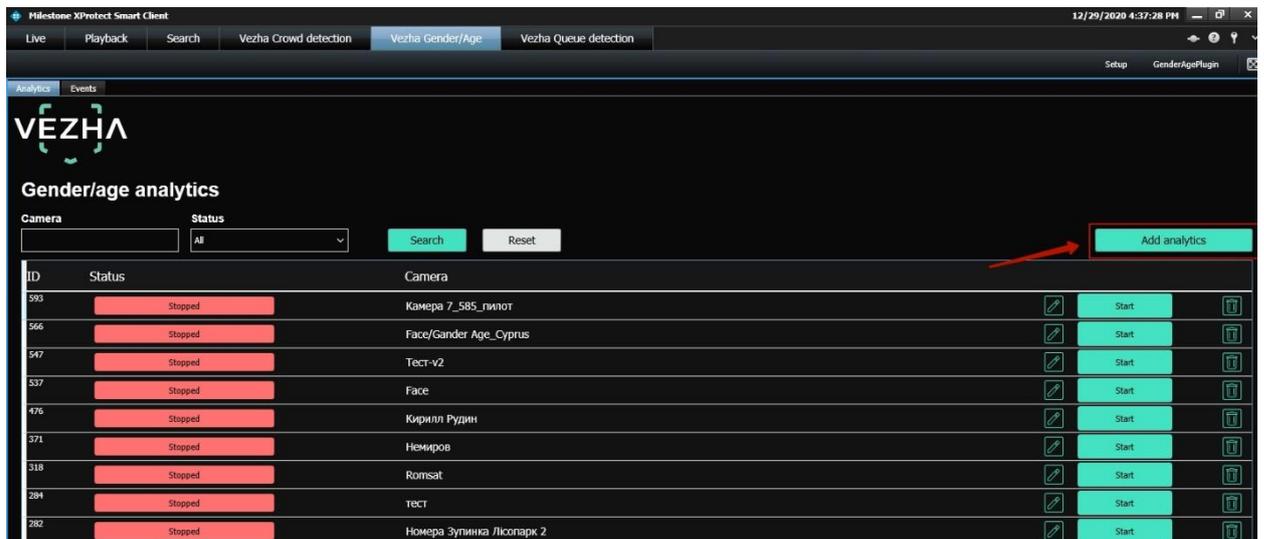
- [Analytics Adding](#)
- [Analytics Editing](#)
- [Working with Analytics](#)

In order to view analytic select **Gender/Age** in the left menu and pass into section **Analytics**.



#### 4.1 Adding Gender/Age Analytics

The page displays a list of analytics with the status and the ability to edit, add, or delete analytics. In order to add a new analytics, press **Add Analytics** in the upper-right corner of the screen.



When press **Add Analytics** the form of analytic adding is opened.



Adding analytics

Stream: Face/Gander Age\_Cyprus [Add stream]

Min face height [?]

Max face height [?]

Cancel area if interest | Update video stream | Save

By pressing **Update Video Frame** button you can see a frame in real time in the field of frame addition. It is possible if videostream was selected.

For adding of analytics it is necessary to fill the following fields:

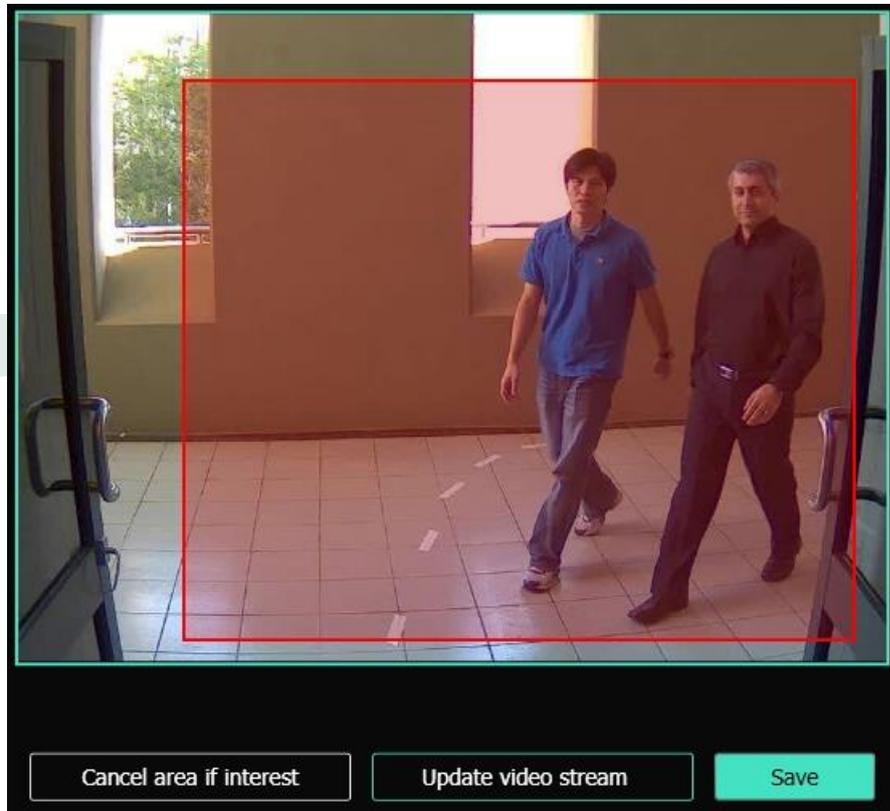
Field Name	Description
<b>Videostream</b>	Press in the field and select the camera name from a drop-down list. Videostream will be used to create analytics.
<b>Minimum Face Height</b>	Establish the minimum size of the face which will be recognized by analytics. Minimum possible value is 80 pixels.
<b>Maximum Face Height</b>	Establish the maximum size of the face which will be recognized by analytics.

### Adding an Area of Interest

1. Add camera to **Videostream** field.
2. A video from the added camera will appear below **Videostream** field.

3. Add area of interest.

a) Press **Add Area of Interest**. Red color area appears.



b) Using the tools at area edges, reduce and set the area to the desired location for definition. The displayed area will be used for face recognition and identification of their gender and age. In order to cancel the area of interest, press **Cancel Area of Interest**.

To create the analytics, press **Save**.

## 4.2 Analytics Editing

To open the edit window, press the edit icon on the right side of the analytics record.

**Gender/age analytics**

Camera:  Status:

ID	Status	Camera			
993	Stopped	Камера 7_585_пилот		<input type="button" value="Start"/>	
566	Stopped	Face/Gander Age_Cyprus		<input type="button" value="Start"/>	
547	Stopped	Тест-v2		<input type="button" value="Start"/>	
537	Stopped	Face		<input type="button" value="Start"/>	
476	Stopped	Кирилл Рудин		<input type="button" value="Start"/>	
371	Stopped	Немиров		<input type="button" value="Start"/>	

When press the edit icon, analytics editing form is opened.

Edit analytics

Start

Stream Face/Gander Age\_Cyprus

Min face height 50

Max face height 400

Cancel area if interest Update video stream Save

It is possible to change the analytic if the analytic is not started.

In order to run analytics, press **Start**. To stop analytics, press **Stop**.

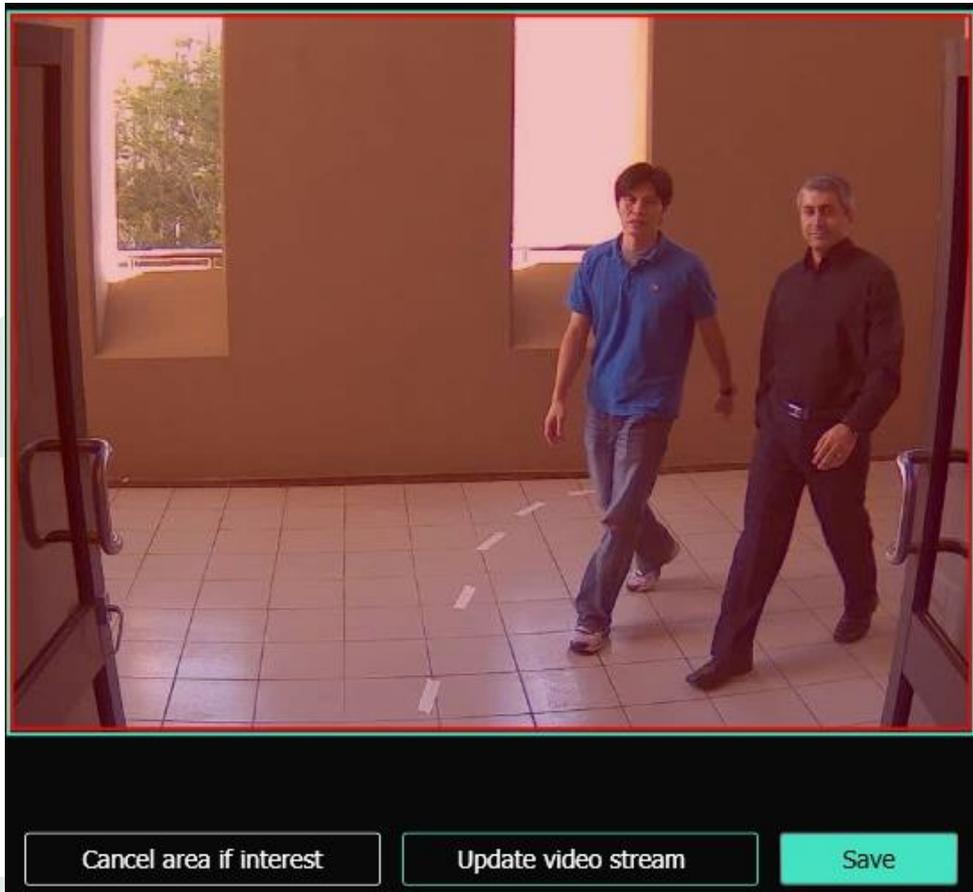
By pressing **Update Video Frame** button you can see a frame in real time in the field of frame addition.

System user can change the following fields:

Field Name	Description
<b>Minimum Face Height</b>	Establish the minimum size of the face which will be recognized by analytics. Minimum possible value is 80 pixels.
<b>Maximum Face Height</b>	Establish the maximum size of the face which will be recognized by analytics.

### Changing the Area of Interest

a) Press **Add Area of Interest**. Red color area appears.



b) Using the tools at area edges, reduce and set the area to the desired location for definition. The displayed area will be used for face recognition and identification of their gender and age.

In order to cancel the area of interest, press **Cancel Area of Interest**.

To create the analytics, press **Save**.

### 4.3 Working with Analytics

Search field is located at the top of the **Analytics** page

**Analytic Search**

## Gender/age analytics

Camera

Status

Search

Reset

To find the necessary analytics, enter the name or status of analytics.

To start the search press **Search** button. To clear the settings, press **Reset**.

Search Field	Parameters
Camera	It is possible to enter videostream name or part of the name in this field
Status	Select the Analytics status from the drop-down list

## Analytics Start and Delete

To start analytics, press Start button on the right side with analytics name field. To stop analytics, press **Stop** button.

ID	Status	Camera		
593	Stopped	Камера 7_585_пилот		
566	Stopped	Face/Gander Age_Cyprus		
547	Stopped	Тест-v2		
537	Stopped	Face		
476	Stopped	Кирилл Рудин		
371	Stopped	Немиров		
318	Stopped	Romsat		
294	Stopped	тест		

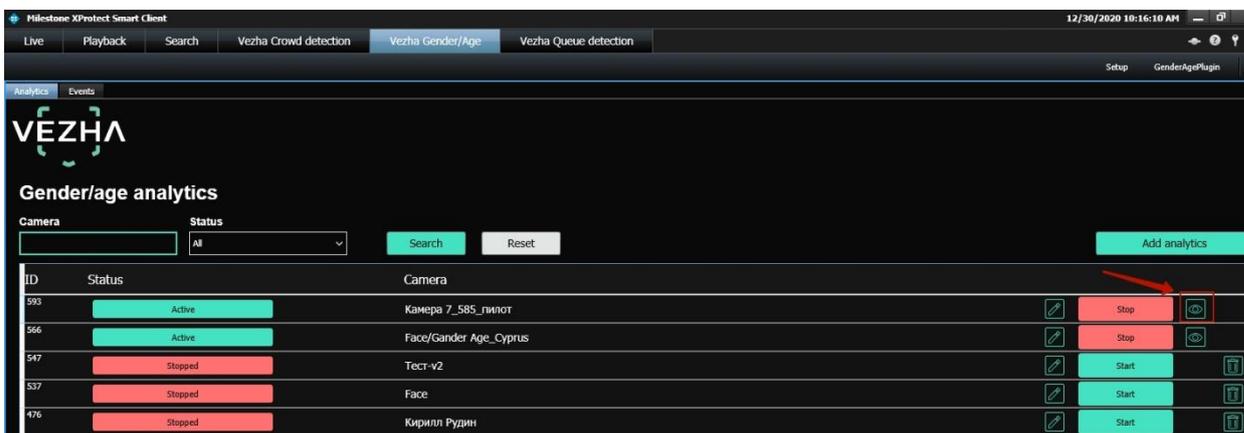
To delete analysis, click delete icon on the right side of analytic field.

ID	Status	Camera		
593	Stopped	Камера 7_585_пилот		
566	Stopped	Face/Gander Age_Cyprus		
547	Stopped	Тест-v2		
537	Stopped	Face		
476	Stopped	Кирилл Рудин		
371	Stopped	Немиров		
318	Stopped	Romsat		

In opened window click **Yes** to confirm the deletion or **No** to cancel the deletion.

## Analytics Viewing

To view Analytics, press the icon on the right side of the screen.



The screenshot shows the 'Gender/age analytics' section of the Vezha software. It features a table with columns for ID, Status, and Camera. The 'Status' column contains colored bars indicating the state of each stream: green for 'Active' and red for 'Stopped'. A red arrow points to a camera icon in the rightmost column of the table.

ID	Status	Camera	Actions
593	Active	Камера 7_585_пилот	[Edit] [Stop] [Camera Icon]
566	Active	Face/Gender Age_Cyprus	[Edit] [Stop] [Camera Icon]
547	Stopped	Тест v2	[Edit] [Start] [Trash]
537	Stopped	Face	[Edit] [Start] [Trash]
476	Stopped	Кирилл Рудин	[Edit] [Start] [Trash]

It is possible to view only active videostreams.

## 5. Gender/Age Module – Statistics

In order to view heat map statistics select **Gender/Age** in the left menu and pass into section **Statistics**.



The screenshot displays the 'Statistic' section of the Vezha software. It includes a line graph showing data over time, a donut chart, and a data table. A red arrow points to the 'Events' button in the top navigation menu.

**Statistic**

Camera: All | Period: 30-11-2020 00:00:00 - 30-12-2020 00:00:00 | All | Search

Days | Weeks | Months | Export | PDF | Excel

Date	5-7	8-15	8-16	16-21	17-21	22-30	31-35	36-40	36-42	41-45	43-50	46-50	51-56	51-55	56-60	57-65	61-65	66-80
01-12-2020	0	0	1	0	1395	11772	1394	0	2618	0	6527	0	1	0	0	0	0	1
02-12-2020	0	0	2	0	2680	24119	2675	0	5362	0	13373	0	0	0	0	3	0	8
03-12-2020	0	0	13	0	2674	24940	2630	0	5309	0	13146	0	2	0	0	5	0	43
04-12-2020	0	0	0	0	2683	24148	2694	0	5365	0	13414	0	0	0	0	0	0	0
05-12-2020	0	0	2	0	2684	24145	2682	0	5364	0	13408	0	0	0	0	1	0	3
06-12-2020	0	0	0	0	2680	24149	2682	0	5365	0	13408	0	0	0	0	0	0	2

Gender/Age Statistics is intended for reports generation and creation on the number of persons of a certain gender and age for a specified period.

In order to filter statistics it is necessary to perform the following actions:

1. Select the time period for which statistics will be generated.



To select a period, enter one of the following values: today, yesterday, last 7 days, last 30 days, this month, previous month, manually selected period (using calendar specify a range of days and times).

2. Select camera. It is possible to select **All** cameras, or specific camera.



3. Select the desired gender. It is possible to select **All**, or specific gender.



4. Press **Search** button.

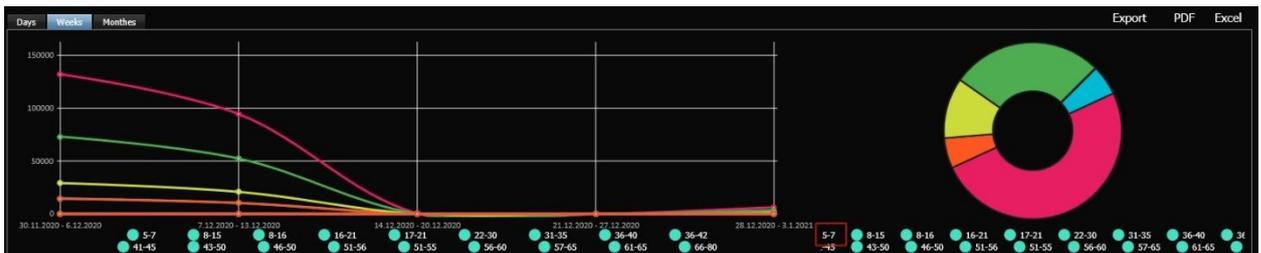
## Statistic

**Camera**  **Period**

To view statistics by hours, days, weeks, and months, select the appropriate tab.



In **Days**, **Weeks**, and **Months** tabs, it is possible to remove unnecessary items from the chart by clicking on the item name under the chart or pie chart.



## About VEZHA:

Our mission is to create a safe environment  
for residents of cities of all sizes  
and to help Ukrainian businesses optimize their security  
and safety management processes.

For more information visit: <https://vezha.io/>



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