USER MANUAL

traffic viewer

product version: 1.5.15.0

1 product overview

Overseer Parking is designed for automation of parking operations. The core feature of this software system is license plate recognition (LPR), used at establishments with private and public parking lots (for example, business centers, hotels and resorts, repair shops, residential areas).

This manual is designed for users of **Overseer Parking** client application — **Traffic Viewer**. Here you will find detailed description of its filtering functionality, as well as export feature.

2 user interface overview

Before using the functionality of **Traffic Viewer**, get to know its straightforward user interface (Fig. 1):

1. **Recognition protocol** is a listview that displays the information about recognized license plates. Each set of information on specific license plate makes an *event*.

   > You will find the detailed description of the recognition protocol further in this section.

2. **Image viewer** is an interface element that displays images of an identified vehicle. Two types of images are available:

   - full frame on which the vehicle was detected (on the **Recognition** tab).
   - cropped image containing the vehicle only (on the **View** tab).

   Take into account that the image won't be available for viewing in **Traffic Viewer** UI, if it is no longer stored in its database (e.g. storing time has expired).

3. **Filter** button opens the **Filter settings** window to search for events by one or various filtering criteria. See the Filtering events section for detailed instruction.

4. **Export** button opens a window for saving the recognition events into either HTML of CSV file. See the Exporting events section for detailed instruction.

Figure 1: UI elements of **Traffic Viewer**

The following information on each event is displayed in the recognition protocol (Fig. 2):

1. Minimized cropped image of a vehicle which license plate was recognized.

2. Identifier of surveillance camera and the camera group to which it belongs. For example, "Camera 1" is among the cameras installed at the main entrance of the building — hence the name of the group ("Main entrance").

3. Entry time and date (of the identified vehicle). Format: hh:mm:ss dd:mm.

4. Recognized license plate number and its cropped image.

5. The emirate to which the identified vehicle belongs. The "Unknown" value will be returned if the emirate wasn't determined from the analyzed license plate.

6. Plate category (for example, "Commercial", "Private", "Police").

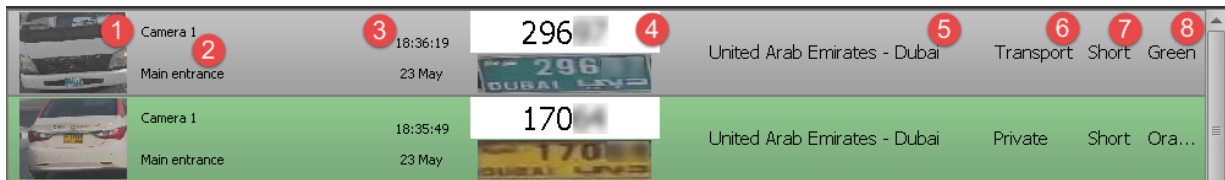7. Plate type (e.g. "Long", "Short").

8. Plate color.

Figure 2: Elements of the recognition protocol

3 filtering events

Search and filtering operations are carried out to simplify working with large number of recognition events. The difference between the two types of operations is conditional. While search aims to locate a single specific event in the list, filtering is aimed at creating a specific list of events.

In both cases, the selection may be carried out using one or many parameters.

To search for events:

1. Click **Filter** button below the recognition protocol.

2. Click **Add filter** button in the **Filter settings** window that appears.

3. Select the filter from a dropdown (for example, **Search by time**).

   See the detailed filters description further in this section (Table 1).

4. Select the additional filtering parameter from a second dropdown (if appeared), e.g. **For the last**).

5. Set the filtration value (for example, "2 days") (Fig. 3).

Figure 3: Filtering by one value

6. Click **Add filter** button again or the [+] button to search by multiple filters (Fig. 4). To delete a filter, click the [-] button.

7. Click **Save** to confirm filtering of events in the recognition protocol.
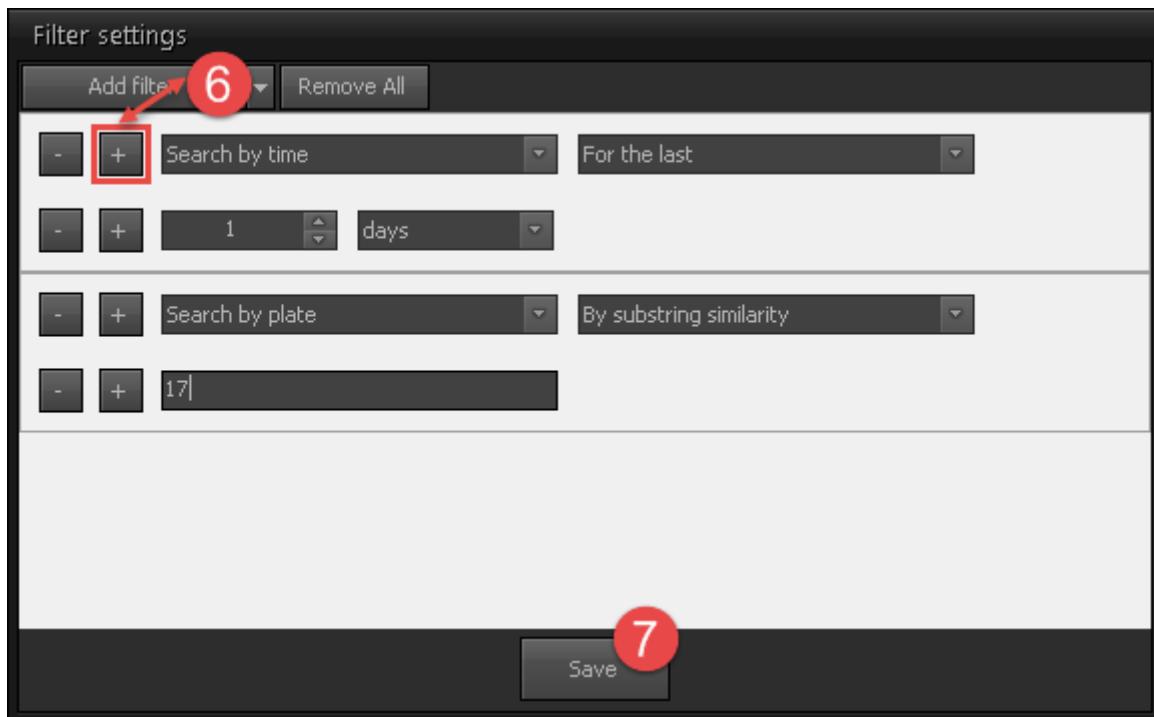
Figure 4: Filtering by two values

If multiple filters are used, they are connected by logical AND.

If filtering is done using parameter with dropdowns (e.g. **Search by time**, **Search by post**, **Search by channel**), multiple values can be selected for one filter (Fig. 5). In this case the values are connected by logical OR. This means that the recognition protocol will display events that meet *at least one* of the filtering values.
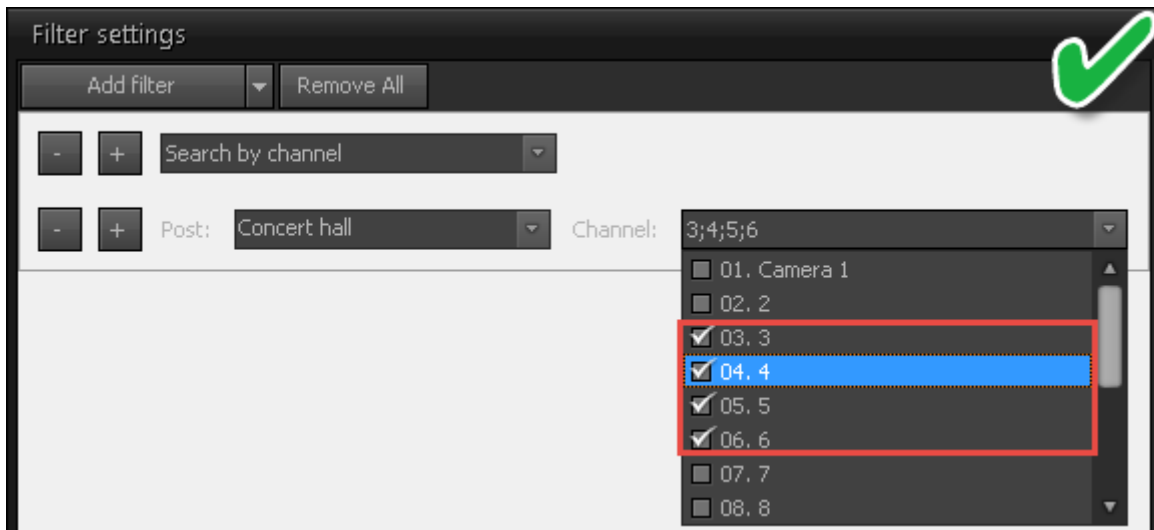

Figure 5: Selecting multiple values for a filter with dropdown (correct)

It is not recommended to set the values separately (Fig. 6) in such cases, since they will be connected by logical AND. This way no events will be displayed in recognition protocol.
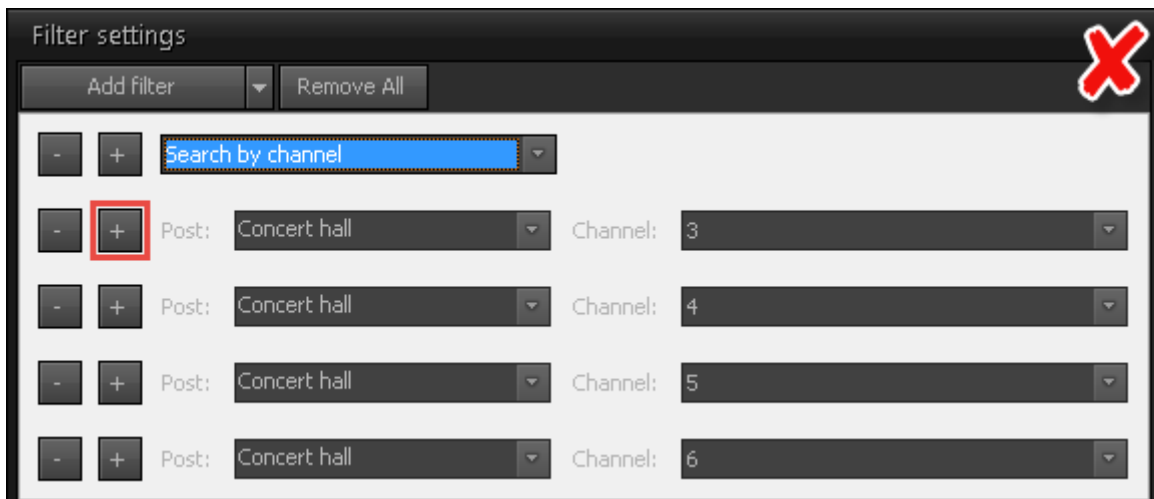
Figure 6: Selecting multiple values for a filter with dropdown (incorrect)

To disable the filtering applied to the events in recognition protocol, open the **Filter settings** window and click the **Remove All** button.

Table 1: Available filters and filtering criteria

Filter	Filtering criteria
Search by plate	**By license plate fragment**: selecting license plates that contain the specified set of characters (substring). **Matches**: selecting license plates that completely match inserted value. This filter is to be used when you exactly know the license number you are looking for. **Begins with**: selecting license plates that have first characters matching specified symbols. For example, you want to find all the numbers which start with 296. So you select this filter and type the value. Then in your recognition protocol you'll see all the recognized numbers which start with the specified characters (if any). **Resembles the template**: selecting license plates that differ from the filtering value within the specified number of characters. For example, you need to find all the recognized numbers that resemble 29600. So, for this filter, you have to type in the filtering value "29600" and specify that 2 characters within found numbers can differ from inserted characters set. As a result, you'll get 29697, 15600 and other values which differ only for 2 characters (if any).
Search by time	**For the last**: selecting the events created within a specified period of time before the filter was activated. Available units are days, weeks, months and years.

Filter	Filtering criteria
	By the date: selecting the events created on the specified date and time. **Before**: selecting the events created *before* the specified date. **After**: selecting the events created *after* the specified date and time. **Between**: selecting the events created *within* a specified period of time.
Search by post	Selects the events that were generated on the specified surveillance post.
Search by channel	Selects the events generated from processing the videostream from the specified camera(s).
Search by country	Selects the recognized license plates that belong to the specified country state(s).
Search by plate size	Selects the recognized license plates that have the specified plate size(s).
Search by plate color	Selects the recognized license plates that have the specified plate color(s).

For the convenience of the user, recognition protocol has the **History** mode. It is activated by clicking the **History** button available if a number is selected in recognition protocol. The events will be filtered by that license plate. As a result, the protocol will display all the events concerning that number. To deactivate this mode, click the **History** button again.

For example, in your recognition protocol you see that a new vehicle has entered your facility. You want to know whether that vehicle has visited your establishment before. So you select the corresponding event in the recognition protocol and use the **History** mode (Fig. 7).
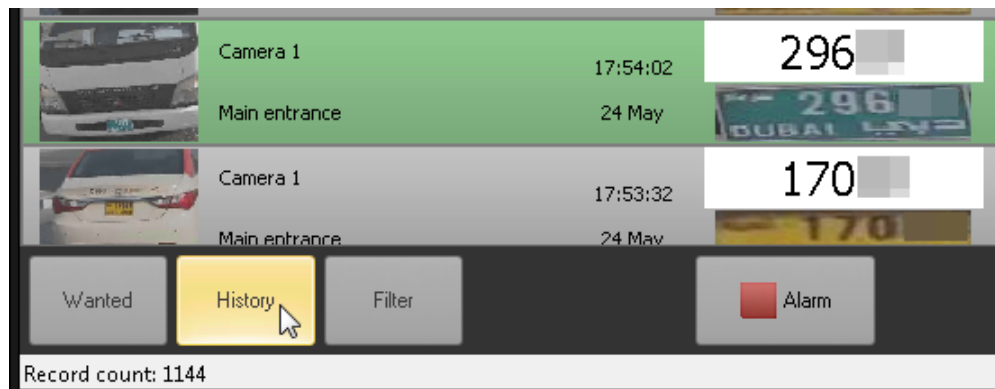

Figure 7: Activating the **History** mode with the LPR event selected in recognition protocol

4 exporting events

Export button opens a window for saving the active list as a file. Both general and filtered events lists are available for export.
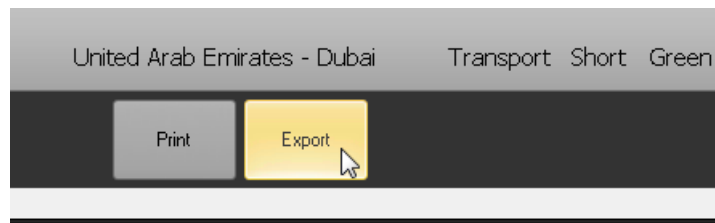
Figure 8

After clicking the button:

- specify or create a folder to which the export files will be saved;
- select type of the files (HTML or CSV).

No actions should be applied to the file until the successful export is confirmed with a special pop-up window:
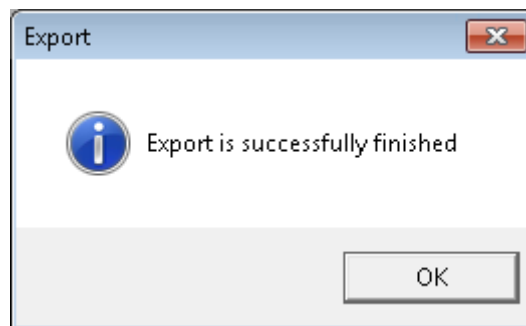

Figure 9