VideoXpert Plates v 1.0 Manager

User Manual
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Preface

This user manual is designed for the management and proper use of VideoXpert Plates Manager.

This manual is intended for administrators and users of the VideoXpert Plates Manager back office application and is applicable to Version 1.4. It covers the configuration and operation aspects of VideoXpert Plates Manager. Installation is detailed in the separate document: “VideoXpert Plates Installation Manual”.

Before using VideoXpert Plates Manager it is recommended that you read through the entire manual at least once.

The section titled Configuration Examples in this manual explains, in detail, the different configurations that can be used as a starting point for more complex scenarios.
Introduction

VideoXpert Plates Manager is a back-office application used to centrally manage ALPR reads transmitted from ALPR cameras performing access control, parking or traffic applications in any environment. After it is setup, ALPR reads will be received and processed (e.g. checking for White lists, generating alarms, controlling barriers etc.) The program then communicates seamlessly with the VideoXpert Plates VideoXpert OpsCenter Plugin bringing the most common functionality into VideoXpert.

This manual allows the user to explore the full functionality of VideoXpert Plates Manager. The more advanced features must be accessed directly though the program. These advanced functions are not accessible from VideoXpert.

VideoXpert Plates Manager provides total control of vehicle traffic not only by recording vehicle movements through established control points, but also by automating access to restricted areas, issuing alerts for selected vehicles (using blacklists), generating reports with images, and acting as the main application for real-time monitoring and control of vehicles across a site.

From the most basic management of a private car park to the control of traffic across a city, VideoXpert Plates Manager facilitates enforcement management and access control to restricted areas.

Minimum PC Requirements

- Windows 7
- 32 bits (x86) o 64 bits (x64) processor at 1 GHz or higher
- 4 GB RAM
- 40GB (32-bit) or 80GB (64-bit) of hard disk space available.
- Microsoft .NET Framework 4.5.2 or higher

Database Requirements

Postgres is the included database manager and does not need any additional components.

*PostgreSQL is a powerful, open source object-relational database system that uses the SQL language to store data.*
Software Installation

See the VideoXpert Plates ALPR Installation Guide which will install all the necessary software components.

Note that VideoXpert Plates Manager is installed as a Windows Service and must be accessed via a web page.
The Application

After installation, VideoXpert Plates Manager can be accessed by the URL http://serverip:8080/vxplates where serverip is the IP address of the machine where VideoXpert Plates Manager is installed.

If it is installed on the same PC as the web browser then this address will be: http://localhost:8080/vxplates.

Login

The VideoXpert Plates Manager login screen will be displayed in the browser, asking for the user name and password:

VideoXpert Plates Manager creates the default user “admin” with password “admin” when no other users have been added to the system.

Optionally, you can select the "Remember me" option so that the system saves your credentials for one week.
VideoXpert Plates Manager Application Layout

The application layout is made up of the following elements:

1. Menu Button. Click this button to access the Main Menu.
2. Main Menu. Here you can access the following options:
   - PLATES
   - LISTS
   - ACTUATORS
   - AUTHORIZATIONS
   - CONFIGURATION
   - SETTINGS
   - LOGOUT
3. Secondary Menus. These allows access to further options for each Main Menu option.
   - LISTS
     - Plates
     - List
   - ACTUATORS
     - Actuators
     - Actuator Links
   - CONFIGURATION
     - Zones
     - Cameras
     - Schedule
     - Sections
     - Capacity
   - SETTINGS
     - Settings
     - Users
     - Audit
4. The Current User button – default ADMIN.

NOTE: All the above will be explained in detail on the following pages.
The above is an example, at initial set-up this is blank

1. Search button. This button opens the Search dialogue box.
2. Search Filters area including a clear search options button and an advanced search button.
   NOTE: Search options are available for PLATES, LIST-Plates, and SETTINGS-Audits.
3. The Clear search criteria button.
5. Data list area.
6. List view configuration button (See ‘How to configure your personal view’ below.)
7. List tools area. This can include:
   - An items counter
   - Refresh button
   - Add item button
   - Download button

**Personalizing the Display**

VideoXpert Plates Manager can be configured to show only the data that the user wants to see.

To do this, in most tables you will see a settings icon at the bottom left of the screen which allows you to configure the fields that you want display. Click on the icon and a pop-up window will appear as shown below.
The user can enable or disable any of fields as required by using the sliders. These can be used for the PC web environment or when being accessed from tablet or mobile devices.

You can adjust the width of each column and modify its position on the grid.

At the bottom of the pop-up window, you can restore the default values by clicking on the "DEFAULT CONFIG" button or save your new configuration by pressing the "SAVE" button.
License Plates

Clicking ‘PLATES’ will display a list of current plates recently received.

Note: that any new plates received will NOT be displayed until you press the Play icon, bottom right.

This is where the plate readings that the VideoXpert Plates ALPR recognition systems detect will appear showing the following default fields:

- **Capture Date**: Date and time that the plate was captured
- **Plate**: The ASCII interpretation of the License plate
- **Image**: The image of the license plate (the ‘Plate Patch’)
- **Status**: This indicates whether the vehicle is "Authorized", "Pending", "Confirmed" or "Cancelled". By default, all plates are Authorized at setup. These states are discussed later in the manual.
- **Camera**: The name of camera that detected the license plate
- **Country**: Indicates the country of origin of the recognized plate (if known)
- **Direction**: Indicates the direction the vehicle was travelling. This can be: “Getting closer”, “Getting farther" or “Unknown”
- **Speed**: When a Section is setup, the average speed taken to drive between the section’s two cameras is displayed here against the second camera’s plate read. All other reads will display a -1 here. (See the section titled Create Section.)

License Plate Details

If you click on any of the plates in the list, a pop-up window will appear with the associated meta data of the reading including the source image and a small zoom tool to view the image in detail.
In this pop-up window you can make changes or correct the fields "Plate" and "Original Country".

Note: Proper setting of County/State allows the system to perform grammatical syntax checks, such as defining a 0 as a Zero or the letter O. This does not affect the system’s ability to detect and capture a plate from a country or state that is not selected, it only affects the character recognition accuracy.

Click the "SAVE" button that appears in the bottom left to store the changes.

In the lower right area of the pop-up there are navigation buttons to move through the different records without leaving the pop-up window. To use the zoom tool, move the cursor over the image and the image will automatically zoom in on the area on which you are focusing.
Search Plates

Search Criteria Dialog

In the upper right corner of the table there is a small magnifying glass icon. When clicked, a popup window appears where you can select from the following search filters:

- **Plate:** Here you can search through all the plates using the wildcards * and ? to refine the search:
  - The * symbol replaces any number of characters (including no characters).
  - The ? symbol replaces a single character in the search.

- **Zone:** Filter the results by zone. Cameras can be allocated to a zone – e.g. a car park with several entrances so a search would produce a list of vehicles currently in that zone.

- **Date from:** In this field, you can search from any date simply by clicking in the field. A pop-up window appears where you can select the start date of the search.
• **Time from**: Click here to enter the exact start time of the search. Use the 24-hour format, for example: 08:00.
• **Date to**: As in the previous field, you can search for plates up to a specific date again by clicking in the field. The pop-up window appears where you can select the “To” date and then press “OK”.
• **Time to**: Click here to enter the exact end time of the search. Use the 24-hour format, for example: 23:59.
• **Country**: Filter the results by the country of origin of the plate.

**Make, Model and Color**: This feature is not currently supported.

**Camera**: Filter the results by a camera.

**Status**: Filter the results by the selected vehicle status.

**Direction**: Filter the results by the selected direction.
**Speed:** Not currently supported.

**Filter by alarm:** Only the plates that have generated an alarm will be shown.
**Search Filters**

VideoXpert Plates Manager includes a fast way to use filters by adding your own search criteria as a text string. The PLATES page includes a search filter bar in the Search area, where you can add or remove search filters:

![Search Filters](image)

Search filter syntax is: **Key: FilterValue**, where:

<table>
<thead>
<tr>
<th>Field</th>
<th>Filterkey</th>
<th>FilterValue</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMERA</td>
<td>CAMERA</td>
<td>Camera ID or camera name</td>
</tr>
<tr>
<td>COUNTRY</td>
<td>COUNTRY</td>
<td>Country code (see combo box)</td>
</tr>
<tr>
<td>DIRECTION</td>
<td>DIR</td>
<td>unknown, gettingCloser or gettingFarther</td>
</tr>
<tr>
<td>PLATE</td>
<td>PLATE</td>
<td>p.e. M4616WZ</td>
</tr>
<tr>
<td>STATUS</td>
<td>STATUS</td>
<td>ok, pending, confirmed, cancelled, exported, prescribed, noAuth or sanctionPending</td>
</tr>
<tr>
<td>ZONE</td>
<td>ZONE</td>
<td>Zone ID or Zone name</td>
</tr>
<tr>
<td>CAPTURER ID</td>
<td>CAPTURERID</td>
<td>Capturer ID</td>
</tr>
<tr>
<td>CAPID</td>
<td>CAPID</td>
<td>Capturer Type</td>
</tr>
<tr>
<td>CAPTYPE</td>
<td>CAPTYPE</td>
<td>Capturer Type</td>
</tr>
<tr>
<td>ALARM</td>
<td>ALARM</td>
<td>true or false</td>
</tr>
<tr>
<td>MAX LATITUDE</td>
<td>MAXLATITUDE</td>
<td>Max latitude (double)</td>
</tr>
<tr>
<td>MIN LATITUDE</td>
<td>MINLATITUDE</td>
<td>Min latitude (double)</td>
</tr>
<tr>
<td>MAXLON</td>
<td>MAXLON</td>
<td>Max longitude (double)</td>
</tr>
<tr>
<td>MINLON</td>
<td>MINLON</td>
<td>Min longitude (double)</td>
</tr>
<tr>
<td>DATE FROM</td>
<td>DATEFROM</td>
<td>DateTime format dd/MM/yyyy hh:mm:ss, example: 08/01/2018 10:22:29</td>
</tr>
<tr>
<td>DATE TO</td>
<td>DATETO</td>
<td>DateTime format dd/MM/yyyy hh:mm:ss, example: 08/01/2018 10:22:29</td>
</tr>
</tbody>
</table>

Note: To clear search criteria use button located at right of the Filter bar.
Real-time View

Click the “Play” button (bottom right of the screen) to see plate reads as they arrive in real time.

When this option is enabled, all plate reads received from the ALPR readers will be displayed immediately in the main screen, the most recent at the top.

Note: This only works if the current user has been authorized.

Enable this by clicking CONFIGURATION then select the ZONES main Tab. Click on the appropriate zone and select which users receive real time events that are generated. Select the appropriate user from the users list and double click on the user to move it across to the right-hand box (assigned users). This user can now view real-time information.

*The reason this is not set as a default is that there might be a massive amount of information being received from many readers. This would overload the system.*

Download Plates

To download a Plate list, click the *download* button at the bottom-right of the plate list page:
Before downloading, consider the number of plates in your current search—in this case nearly 14,000. Keep this to a reasonable number by using more Search Filters to avoid a massive download that could lock-up your system.

Two files are downloaded: a .csv file containing a list of plates from the search results and a corresponding .zip file containing all the images of the vehicles. The files appear at the bottom of the screen and are downloaded to your Windows download directory.

The Downloaded file is a CSV format file (with ; as a separator). It includes a header and the following columns:

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>CameraId</td>
<td>Integer($int32)</td>
<td>1</td>
</tr>
<tr>
<td>CameraName</td>
<td>String</td>
<td>“Camera1”</td>
</tr>
<tr>
<td>Latitude</td>
<td>Number($double)</td>
<td>12.1234</td>
</tr>
<tr>
<td>Longitude</td>
<td>Number($double)</td>
<td>12.1234</td>
</tr>
<tr>
<td>PlateNumber</td>
<td>String</td>
<td>“M4616WZ”</td>
</tr>
<tr>
<td>OriginalPlateNumber</td>
<td>String</td>
<td>“M4616WZ”</td>
</tr>
<tr>
<td>Country</td>
<td>String</td>
<td>“ESP”</td>
</tr>
<tr>
<td>OriginalCountry</td>
<td>String</td>
<td>“ESP”</td>
</tr>
<tr>
<td>TakenOn</td>
<td>DateTime as String</td>
<td>“2017-12-19T11:38:33.12Z”</td>
</tr>
<tr>
<td>Status</td>
<td>“OK”</td>
<td>“Pending”</td>
</tr>
<tr>
<td>Direction</td>
<td>“unknown”</td>
<td>“gettingCloser”</td>
</tr>
<tr>
<td>Confidence</td>
<td>Integer($int32)</td>
<td>89</td>
</tr>
<tr>
<td>OcrlImageId</td>
<td>Integer($int32)</td>
<td>12301</td>
</tr>
<tr>
<td>EnvlImageIds</td>
<td>List of Integer($int32)</td>
<td>[12300, 12302, 12303]</td>
</tr>
<tr>
<td>Signaled</td>
<td>Boolean</td>
<td>false</td>
</tr>
<tr>
<td>AvgDigitsHeight</td>
<td>Integer($int32)</td>
<td>16</td>
</tr>
<tr>
<td>MultiplateRate</td>
<td>Integer($int32)</td>
<td>2</td>
</tr>
<tr>
<td>Field</td>
<td>Type</td>
<td>Example</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>ProcessingTimeOCR</td>
<td>Number($double)</td>
<td>72.817330121994019</td>
</tr>
<tr>
<td>CapturerId</td>
<td>Integer($int32)</td>
<td>2</td>
</tr>
<tr>
<td>CaptuerType</td>
<td>String</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>IsAlarm</td>
<td>Boolean</td>
<td>false</td>
</tr>
<tr>
<td>Id</td>
<td>Integer($int32)</td>
<td>1</td>
</tr>
<tr>
<td>ResourceName</td>
<td>String</td>
<td>&quot;plate&quot;</td>
</tr>
</tbody>
</table>
Black and White Lists

Selecting LISTS from the Main drop-down Menu allows the user to create multiple whitelists or blacklists. Vehicles (plates) that appear on a whitelist are always authorized to enter an associated zone. Vehicles on a blacklist will create an alarm in the system if the plate is detected in an associated zone. When a zone is a parent of another zone, the lists are always inherited.

Lists Tab

This area shows all lists created. You can add, edit or delete any of them.

In the main window of this menu you can see the name of the list, the type of list, description, a color marker code of the list, the user and zone associated with it and the owner. (See below for more details). There are also icons to import the list from a file, to renew the from-to dates of the list and finally an icon to delete the list.

Clicking on any element of the list will open a sub-menu.

Note that the Columns displayed can be configured by pressing the Settings icon (bottom left).
Add a New List

At the bottom right of the screen there is a "+" button to add a new list to the system.

This opens a pop-up window with various options listed below:

- **Name**: Insert a name for the list.
- **Description**: Insert a description of the list.
- **Type**: Set the list to be a blacklist or whitelist.

- **Color**: Choose a reference color code for the new list. Once you click on this option you will see a color palette where you can select the color you want by using the cursor, the field will automatically display the associated hexadecimal color code.

- **Users**: Defines the user who will receive events linked to the list.
• **Zone**: Insert the zone associated to the list.

• **Owner**: This field is automatically filled with the user who created the list.

**Delete a List**

To delete a list, simply click in the trashcan icon at the right of the list.

Once this button is pressed, a confirmation window will appear asking you if you want to delete the list.

If you are sure, press the "OK" button and the list will be deleted; otherwise click Cancel.

**Import List**

**File Format**

VideoXpert Plates Manager allows you to import List records using standard CSV files.

The format is defined as follows:

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>plate (required)</td>
<td>String</td>
<td>0933BFF</td>
</tr>
<tr>
<td>activefrom (required)</td>
<td>DateTime as String</td>
<td>2017-01-01T00:00:00.00Z</td>
</tr>
<tr>
<td>activeuntil (required)</td>
<td>DateTime as String</td>
<td>2017-12-31T23:59:59.00Z</td>
</tr>
<tr>
<td>Comments (required)</td>
<td>String</td>
<td>Comments</td>
</tr>
<tr>
<td>Description (required)</td>
<td>String</td>
<td>Description</td>
</tr>
<tr>
<td>hitcount</td>
<td>Integer( $int32 )</td>
<td>5</td>
</tr>
<tr>
<td>lastDetection</td>
<td>DateTime as String</td>
<td>2017-12-19T11:38:33.12Z</td>
</tr>
</tbody>
</table>
For example, a file might contain the following data:

```
plate;activefrom;activeuntil;comments;description
ABC123;2019-01-01T00:00:00.00Z;2020-01-01T00:00:00.00Z;Comment 1;description 1
XYZ234;2019-01-01T00:00:00.00Z;2020-01-01T00:00:00.00Z;Comment 2;description 1
LAW345;2019-01-01T00:00:00.00Z;2020-01-01T00:00:00.00Z;Comment 3;description 1
```

Important!

- The CSV file must include a header with column names.
- The CSV file uses a semicolon (;) as a column field separator.
- The CSV header must include `plate`, `activefrom`, `activeuntil`, `Comments` and `Description` columns.
- DateTime fields are UTC time in ISO-8601 format - encapsulated in the String format: "YYYY-MM-DDTHH:MI:SS.SSZ" with HH in 24h format.

Note: Fields `hitCount` and `lastDetection` help when exporting or importing lists from different VideoXpert Plates Manager installations.

**Import a Plate List From a CSV File**

To upload a plate list to a CSV file, simple click upload icon next to any List entry (see below):

A selection file windows is opened:

Select a folder and file and click Open. File opening times will vary depending on size of the files.
A message is displayed showing how many Plates have been imported:

You can then review the imported data in the List items screen (see next section).

**Plate List Items**

In LISTS, PLATES, you can see all the individual plates and their associated lists that have been setup.

You can see each list's details, when it was added and its validity period, the vehicle plate, how many times it has been detected in the validity period, the last sighting, the description of the list, and a small trash can icon to delete individual plates.

Clicking on any field of a plate entry will open the edit menu.

**Search Criteria**

In the upper right corner of the table there is a small magnifying glass icon . If you click on it a popup window will appear where you can select the following search filters:
- **List**: Filter the results by list (allow multiple selection).
  
  ![List filter options]

- **List type**: This option limits the search to the selected list type (blacklist or whitelist).
  
  ![List type options]

- **Date from**: Shows only the plates detected since the selected date.
  
  ![Date from]

- **Date until**: Shows only the plates detected up until the selected date.
- **Plate**: The registration number of a vehicle can be added as a search criterion. (Wildcards are allowed)
• **Description**: Filter by the description. Wildcards are allowed.
• **Active**: Show only the plates that are active, inactive or both at this moment.
• **Located**: Show only the plates that have been detected at least once, plates never detected or both.

![Filter Options](image)

**Search Filters**

VideoXpert Plates Manager includes a fast way to search a List by adding search criteria as a test string. To enable this, each Plates List page includes a Search Filter where Search Filters can be added or removed:

Search filter syntax is: **Key:FilterValue**, where:

<table>
<thead>
<tr>
<th>Field</th>
<th>Filterkey</th>
<th>FilterValue</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST IDS</td>
<td>LISTIDS</td>
<td>List ID or List name, separated with comma (,)</td>
</tr>
<tr>
<td>TYPE</td>
<td>TYPE</td>
<td>blacklist or whitelist</td>
</tr>
<tr>
<td>ACTIVE</td>
<td>ACTIVE</td>
<td>true or false</td>
</tr>
<tr>
<td>PLATE</td>
<td>PLATE</td>
<td>p.e. M4616WZ</td>
</tr>
<tr>
<td>LOCATED</td>
<td>LOCATED</td>
<td>true or false</td>
</tr>
<tr>
<td>DATE FROM</td>
<td>FROM</td>
<td>DateTime format dd/MM/yyyy hh:mm:ss, example: 08/01/2018 10:22:29</td>
</tr>
<tr>
<td>DATE TO</td>
<td>TO</td>
<td>DateTime format dd/MM/yyyy hh:mm:ss, example: 08/01/2018 10:22:29</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td>DESCRIPTION</td>
<td>Text included in Description attribute.</td>
</tr>
</tbody>
</table>

Note: To clear the search criteria use button located at right of the filter bar.

**Add a License Plate to a List**

Click on the “+” symbol located on the bottom right corner of the screen.
Complete the following fields:

- **Plate**: The license plate to add to the list
- **Description**: A description of the plate
- **List**: A list to which the plate will be added
- **Active from**: Starting date of the plate in the list (validity period)
- **Active to**: Finish date of the plate in the list
- **Comments**: Freeform text comment to be associated with the plate

All fields in this pop-up menu marked with an asterisk are required. To add a record, press the "Save" button. The window will close automatically, and the record will be added.

**Edit Plate List Item**

To edit a list, simply click on the list to open it.

This pop-up window is opened:

Note: For more details, review the previous section.

**Delete a Plate List Item**

To delete a Plate list item, simply click in the trashcan icon associated with each list.
Export All Plates in Lists

To export all the plates, first choose which fields are to be exported by pressing the Settings icon (bottom left). You will see a list of available fields; we can select which should be displayed on the screen, but we can also use the ‘Export’ slider to add them to the .csv output file.

Select the CSV File Download icon (bottom right) to start the export.

The exported file will be saved to the standard Download folder – and is shown at the bottom of your screen.

Opening in Notepad shows the file:

```
Plate;ListId;ActiveFrom;ActiveUntil;Comments;Description;HitCount;LastDetection;Id
AAA345;1;2019-01-01T00:00:00.000+00:00;2026-01-01T00:00:00.000+00:00;Comment 3;description 1;0;3
AAA234;1;2019-01-01T00:00:00.000+00:00;2026-01-01T00:00:00.000+00:00;Comment 2;description 1;0;1
AAA123;1;2019-01-01T00:00:00.000+00:00;2026-01-01T00:00:00.000+00:00;Comment 1;description 1;0;2
```

In this case all plates were in List 1.
Actuators

An actuator, otherwise known as a relay, is normally an opto-isolated device used for triggering external devices such as car park barriers or traffic lights.

Various standard devices are supported, but the most common is the ADAM 6000 series from Advantech. The 6266 model for example is IP controlled and has four separate output channels, meaning that four devices can be controlled from each unit. The advantage of an IP relay device is that it can be sited remotely from VideoXpert Plates Manager. It could even be in a different City and a centralized VideoXpert Plates Manager Back Office is then able to remotely open barriers.

*Note that if the device is not on the same local network then a fixed IP should be used to remotely address it.*

Before attempting to add an actuator to the system, check using the relay manufacturer’s software that it is connected and functioning correctly.

### Add a New Actuator

Click on the plus icon, bottom right, to add a new actuator. A window will appear where you can setup the device.

Enter a descriptive name for the device being controlled and select the type of device from the dropdown list of supported actuators.
Enter the IP address and port number for the device along with the setup user name and password to access the device. The default ADAM 6000 series password is: 00000000.

The State (0 or 1) is what you want the device to be switched to, and the Period in Milliseconds is the relay latch time (the time that the relay is closed). In the case of the ADAM 6000 series relay you can set this time directly by accessing the relay via its IP address or utility software. Most barriers operate on a minimum pulse time of 200 ms.

The Channel is the relay number within the device. In the case of the 6266 it can be set from 1 to 4 to trigger each relay within the device.

After it has been added, you can test the relay by clicking the icon on the right as follows:

A window appears asking you to confirm the test. Use the slider and then click CONFIRM. A success or failure message is then displayed.

Remove an actuator by clicking the Trash Can icon on the far right next to the appropriate actuator.

Note: Use the Gear Icon (bottom left) to select fields to display such as the actuator state.
Authorizations

An authorized plate is one that can be allowed into a zone or allowed to pass a camera. This section allows the user to view, create, edit, and delete the authorized plates in the system. The fields show the license plate of the vehicle, its authorized date range, zone, and enabled schedules.

Clicking on any element of the list will open the edit menu.

Create a Plate Authorization

To create a new authorization, press the add “+” button.
A pop-up window will appear in which the following parameters must be entered:

- **Plate**: Enter the registration number you want to authorize.
- **Active from**: Enter the starting date for the plate to be authorized.
- **Active until**: Enter the end date for the authorization period.
- **Zones and Schedules**: Select the zone for which the vehicle will be authorized, and if applicable, the timetable for the authorization.

![Zone and Schedules]

**Delete an Authorization**

To delete an authorization, click on the associated trashcan icon. After this button is pressed, a confirmation window will appear, asking you if you want to delete this record. If you are sure, press the "OK" button and the authorization will be deleted.
Configuration

This section allows the user to view, create, modify and delete the zones, cameras, schedules, sections, and capacity counting areas.

Zones

In VideoXpert Plates Manager, a zone is a user defined area that may include other zones and/or cameras. When a plate is sent to VideoXpert Plates Manager by an ANPR camera, that plate is assigned to the zone where the camera is configured.

VideoXpert Plates Manager will process each plate according to the zone’s rules, checking if the vehicle is authorized, generating an alarm if necessary, etc. A zone can inherit the schedules of its parent zone.

Clicking on any field of a zone will open the zone editing menu.
Create a Zone

Press the add (+) button at the bottom right of the menu.

A pop-up window will appear in which you can define the following parameters.

- **Name:** User-defined name for the zone
- **Parent:** Select the parent zone (if any). Once a parent zone is select it will be possible to inherit any schedules set.
- **Schedules:** Select the schedules that apply to this zone. If a zone has no schedules associated with it, then all vehicles are authorized by default.
- **Users:** Select which users that can see this zone and receive real-time events generated by it. Do this by selecting the appropriate user from the users list and double clicking on the user to move it across to the right-hand box (assigned users). This user can now view real-time information.
  
  *The reason this is not set as a default is that there might be a massive amount of information being received from many readers, which would overload the system.*
- **Speeding alarm:** This feature is not currently supported. Please see the "Sections and Average Speed Alerts" section for more information on creating an average speed alert.
- **Prowling alarm:** (Frequent Visitors) If activated, an alarm will be generated if the same vehicle is detected \( x \) times in that zone within \( y \) minutes / hours / days (where \( x & y \) are user defined).
- **Kamikaze alarm:** If activated, an alarm will be generated if a vehicle is travelling in the opposite direction to that specified.

Delete a Zone

To delete a zone, click on the associated trashcan icon. Once it is pressed a confirmation window will appear. A zone cannot be deleted if it has one or more associated cameras.

Cameras

This area shows all active cameras defined in VideoXpert Plates Manager including environment (color contextual) cameras.

Clicking on any element of the list will open the edit menu.
Add a Camera

To add a new camera to the system, press the add (+) button (bottom right).

- **Plate Reader Id**: This is a unique identifier defined by the plate reading software.
- **Name**: User defined name to help identify the camera.
- **Type**: Camera type:
  - **Reader**: Select this option if the camera is an ANPR camera.
  - **Environment**: Select this option if the camera is linked to a plate reader but is not the camera capturing the plate. i.e. this is a (color) contextual camera.
    (Use the same Plate Reader Id as this is the associated color contextual camera for the IR camera setup in VideoXpert Plates ALPR)
- **Zone**: Section the area in which you want to register the camera.
- **Address**: User defined address of the camera.
- **Overlay**: User defined text that the software overlays onto the captured ALPR image. You can use the reserved words as listed in the Appendix.
  - e.g. $platenumbers$ seen at $timestamp$ by $cameraname$
- **Longitude and Latitude**: The GPS coordinates where the camera is located. If defined, all the plates read by this camera will be assigned to this location.
- **Capturer**: Used for synchronisation between VideoXpert Plates Manager Servers. It is a user defined name used when sending plate reads to a remote server. The software ensures that the same Capturer ID name is used on both Servers.
- **Grace Hours**: User defined time in hours. If a plate is not read on this camera for n hours, then an email will be sent to the administrator. Set to 0 for no notifications.
- **Report type**: Select when VideoXpert Plates Manager should store the result.
  - **Free flow**: Store the plate only if it has been detected in free flow mode.
  - **Signaled (Triggered)**: Store the plate only if it has been detected due to an external trigger.
  - **Both**: Store the plate always.
• **Expected Vehicle Direction:** Alarms can be generated if a plate is travelling the wrong way. VideoXpert Plates attempts to determine the direction of each plate read and passes this onto VideoXpert Plates Manager. Values can be:
  - Getting closer. Plates are expected to approach the camera.
  - Getting farther. Plates are expected to be moving away from the camera.
  
  Note that if the camera is positioned very low for example, i.e. below the height of a plate, then the direction can be mis-reported.

Fields marked with an asterisk are required. Once you have filled in all the data click the "Save" button to save the changes.

**Delete a Camera**

To delete a camera, click on the associated trashcan icon. A confirmation window will appear, to delete the selected camera.

**Schedules**

A schedule defines the authorized date ranges for each plate captured.

If the capture date of the plate is within a schedule, then the authorization rules defined for that schedule are applied.

There are only three exceptions:

- If a zone has no schedules linked to it, then all the vehicles are authorized.
- If a vehicle is on a whitelist linked to the zone, that vehicle is always authorized in that zone.
- If a schedule is global, then all the vehicles detected in that schedule are authorized.

**Create a Schedule**

Press the add (+) button at the bottom right of the menu

A pop-up window will appear, in which you can define the following parameters.
- **Description**: User-defined description for the schedule
- **Active from**: The date from which the schedule will be activated
- **Active until**: The end date for the active schedule
- **Global**: Indicates whether the schedule is global or not

**Linking Time Frames to a Schedule**

Usually schedules need to be more flexible than just a start and end date. Different time frames can be defined and associated with a schedule.

After you have created your schedule, you will see a clock icon associated with it. Click on the clock icon to access the Time frames window.

Here you can select the different preconfigured Time frames, or create a new one by pressing the add button (+) located at the bottom right of the window.

**Add or Modify Time Frames**
To add a new Time frame, press the add (+) button at the List view area.

To modify a Time frame, double-click it.

Edit fields as follows:

- **Description**: User defined description
- **Ignore year**: Select this option if you want the timeframe to be valid for any year.
- **Start**: Start values for the time frame
- **Stop**: Finish values for the time frame
- **Day of the week**: Days of the week when this timeframe will be active
- **Months**: Months when this timeframe will be active

When you have finished setting the new Time frame, press the "Save" button and you will return to the list.

NOTE: It is not recommended that you modify preconfigured Time Frames.

To assign the new timeframe to the schedule: press “Save”. Otherwise, close the window to return without changes.

**Delete a Time Frame**

To delete a Time frame, click on the associated trashcan icon. A confirmation window will appear, to delete the selected entry. A Time frame cannot be deleted if it is associated with a Schedule.

**Linking Regular Expressions to a Schedule**

After you have created your schedule, you will see a clock icon associated with it. Click on the clock icon to access the Regular Expressions window.

When inside this menu, you can select previously configured Regular expressions, or create a new one by pressing the add button (+) located at the bottom right of the window.

**Add or Modify Regular Expressions**

A Regular Expression is a mathematical formula or logic expression used for selecting odd plates or plates containing certain character combinations.

To add a new ‘Regular Expression’, press the add (+) button in the List view area.

To modify a Regular expression, double-click it.
To edit fields:

- **Description**: User defined description.
- **Regular Expression**: Fill with an appropriate Regular Expression formula.

When you have finished setting the new ‘Regular Expression’, press the “Save” button. You will return to the list.

To assign the new ‘Regular Expression’ to the Schedule enable it (1) and press “Save” (2). Otherwise, click (3) to return without changes.

**Delete a Regular Expression**

To delete a ‘Regular Expression’, click on the associated trashcan icon. A confirmation window will appear. A Regular expression cannot be deleted if it is associated with a Schedule.

**Delete a Schedule**

To delete a Schedule, click on the associated trashcan icon. A confirmation window will appear. A schedule cannot be deleted if it is associated with a zone.

**Sections and Averaged Speed Alerts**

Lengths of road between any two cameras can be defined as a section. This could be part of a road network, part of a large car park, or even a long entrance lane into an industrial estate where speed is monitored.

The length of the section (the distance between the two cameras) may be defined in meters and the maximum target time to complete the journey set is seconds. This can be considered the average speed limit for the section. By setting these parameters, when a vehicle passes between the two defined cameras in less than the set time, an alert is generated and displayed on the user screen.
The speed is stored against every vehicle passing the second camera and can be seen using the PLATES / SEARCH feature. Plates read by the first camera are shown with a speed of -1. Plates read can be searched by those generating alerts. These alerts can also be sent by email (see the section titled Configuration of Alerts).

**Create Section**
Press the add (+) button at the bottom right of the menu.

A pop-up window will appear:

- **Name**: User defined name for the section
- **Distance**: Distance between the entry camera and the exit camera of that section
- **Maximum**: Number of seconds to abort the calculation
- **Entrance camera**: Entrance camera for the section
- **Exit Camera**: Exit camera for the section

**Delete a Section**
To delete a section, click on the associated trashcan icon. A confirmation window will appear.

**Capacity (Vehicle Count)**
VideoXpert Plates Manager can track the capacity (vehicle count) within a defined area.

**Create a Capacity / Count Area**
Press the add (+) button at the bottom right of the menu.
A pop-up window will appear where you can define the area:

- **Name**: User defined name for the Capacity / Count area
- **Entrance camera**: Entrance camera for the section
- **Exit Camera**: Exit camera for the section
- **Count**: Vehicles inside Capacity / Count area
- **Max Capacity**: The maximum number of vehicles allowed in the Capacity / Count area
- **Maximum time allowed**: By vehicle
- **Reset time**: The time at which the count is automatically reset to zero (for example: 23:00)
- **Ignore Car direction**: The user can choose to ignore the direction of travel.
- **Fire an Alarm if Maximum time is exceeded**: The user can choose to initiate an alarm to VideoXpert or VideoXpert Plates UI.

### Delete a Section

To delete a section, click on the associated trashcan icon. A confirmation window will appear.
Settings

The settings area is only available for administrators. In this section, You can view and modify the main settings for the server. Do not modify the values in this section if you have not read and fully understand this manual.

Settings Tab

![Settings Tab](image)

Configuration of Alerts

![Configuration of Alerts](image)

Click on the blue bars to enable the options.

- **Time between alert for the same vehicle (seconds)**: Set the minimum time between blacklist alerts for the same vehicle.
- **Send alerts by email**: Enable this option to send emails to specified users when an alert is triggered by the system.
- **Email sender address**: Insert the sender’s email address for all alerts.
- **Email sender name**: Enter the name of the sender that will appear in the sent emails.
- **Blacklist alert email subject**: Set the email subject for blacklist alerts. You can use special words that will be replaced by real-time information in the email. The allowed values are described in the appendix of this document.
- **Blacklist alert email body**: Set the mail body for blacklist alerts. You can use special words that will be replaced by real-time information in the email. The allowed values are described in the appendix of this document.
- **Speed alert email subject**: Not currently supported.
- **Speed alert email body**: Not currently supported.
- **Prowling alert email subject**: Set the email subject for prowling alerts. You can use special words that will be replaced by real-time information in the email. The allowed values are described in the appendix of this document.
- **Prowling alert email body**: Set the email body for prowling alerts. You can use special words that will be replaced by real-time information in the email. The allowed values are described in the appendix of this document.
• **Kamikaze alert email subject:** Set the email subject for Kamikaze alerts. You can use special words that will be replaced by real-time information in the email. The allowed values are described in the appendix of this document.

• **Kamikaze alert email body:** Set the email body for Kamikaze alerts. You can use special words that will be replaced by real-time information in the email. The allowed values are described in the appendix of this document.

• **Time in zone alert email subject:** Set the email subject for time in zone alerts. You can use special words that will be replaced by real-time information in the email. The allowed values are described in the appendix of this document.

• **Time in zone alert email body:** Set the email body for time in zone alerts. You can use special words that will be replaced by real-time information in the email. The allowed values are described in the appendix of this document.

• **Time in zone plate distance:** This is the plate match accuracy (Levenshtein distance) of a plate entering and leaving a zone for them to be considered the same plate. Example: if the reader at the entrance reports 1234ABC and the reader at the exit reports 1235ABC and the distance is 1, then system will mark 1234ABC as out.

• **Must send OCR image:** Enable this option to append the OCR image to the emails.

• **Must send environment images:** Enable this option to append the environment images to the emails.

• **Blacklist Levenshtein distance used:** The number of characters that may differ between the plate read and the plate on the blacklist to trigger an alert.

**Configuration of Data Storage**

• **Storage folder for images:** VideoXpert Plates Manager will store all the images in the directory specified. The directory MUST already exist.

• **Must save images:** Enable this option if you want to save the images.

• **Delete images after (days):** VideoXpert Plates Manager will remove (purge) any image older than the amount of days selected here. Set this value to 0 if you want to disable this feature. Note: After the data storage if full, FIFO removal will begin.

• **Process local plates:** Usually this option should be enabled. Disable this option only if VideoXpert Plates Manager should only process new plates inserted by the REST API.

**Configuration of Server**

• **API Key:** Displays the master API Key assigned to the system.

• **Reset API key:** Enable this option to generate a new random API Key for the server.

• **Maximum login tries:** The maximum number of attempts to access VideoXpert Plates Manager before the account is locked (incorrect login credentials).

• **Login disable time:** Set the number of minutes that an account is locked after the maximum number of login tries has been exceeded.
• **Audit days stored**: Enter how many days the audit trail logs will be stored on the system.
• **Audit all users**: When enabled, all the actions of all the users are stored in the audit system. When disabled, only the actions of the users that have been selected for audit are stored.
• **Logout automatically after**: Set the number of minutes that a user can be idle before VideoXpert Plates Manager logs them out and they are required to login again.
• **Encrypt local lists**: Select this option to encrypt all lists on the system using RSA 256-bit encryption. Note that the program currently uses a Postgres database which is already encrypted, so this extra layer is not needed.
• **Password expiration**: Set the number of days before the user is required to change their password.
• **Default time for quick add to list (hours)**: There is a button to quickly authorize a plate on the system for an extra 2 hours. Set this value here - normally 24 hours.

**Configuration of Email Server**

If you require the system to send out email alerts (as defined above for various alarm conditions), then you must setup and configure an email account for the system to use.

• **Enable SSL / TLS**: Enable this option if you want to enable SSL or TLS protocol.
• **SMTP port**: Enter the port number to use to connect to the server, default: 25.
• **SMTP host**: Enter the IP address or the host name of the SMTP server.
• **Time out**: Set the maximum time for sending the email, if the response to the request exceeds that time that the system will not send the information.
• **Must use default credentials**: Enable this option to use the windows user credentials with the SMTP server.
• **Password**: SMTP user password.
• **Username**: SMTP username.

After enabling and completing all email configuration parameters, click the “Save” button. You will be asked to confirm the password:

NOTE: The button changes from “Cancel” to “Confirm” when the password has been input correctly.

**Test Email Server Connection**

To test the email server connection, enter a valid email address to send to, and click the “Save” button. If your configuration is correct, then you will receive an email in your mailbox.
Users Tab
This area shows the active users defined in VideoXpert Plates Manager. You can view, add, modify, or delete any user.

Click on any element of the list to open the Edit menu.

At any given time, any user can modify their password by clicking on the top right icon in the application.

Create New User
Press the add (+) button. A popup window will appear to create a new user.

- **Username**: Username for the new user
- **Password**: Default password for the new user
- **Email**: Enter the user’s email address. This email is used to receive system alerts.
• **Audited**: Activate this option to add this user to the audit trail.
• **Claims**: Set the privileges assigned to the user. Do this by double clicking on an item in the list to move it over to the user column (on the right).

  Allowed privileges are:
  - **Actuators**: The user can setup and configure actuators (relays).
  - **Admin**: Full privileges
  - **Admin Lists**: The user can create, modify, and delete any lists in the system.
  - **Authorizations**: The user can view, create, modify, and delete authorizations.
  - **Basic**: The user can view data for zones, cameras, calendars, license plates, and images.
    The user will only be able to see the information if it is also added for a user in the desired zone.
  - **Cameras**: The user can create and modify cameras.
  - **Lists**: The user can create, modify, and delete only his own lists.
  - **Plates**: The user can modify plates reads, and protect images.
  - **Schedules**: The user can create, modify, and delete schedules and timeframes.
  - **Users**: The user can create, modify, and delete users.
  - **Zones**: The user can create, delete, and modify zones.

• **First Name**: First name of the user
• **Last Name**: Last name of the user
• **Language**: User interface language
• **User ID**: An optional ID normally used by the Police when plates are exported
• **Pushbullet API Key**: This is used with the Pushbullet software, which is used for communicating with mobile devices. The system can be setup to send alarms to such a mobile device. **Note: Pushbullet is a third-party application and is not supported by Pelco in any way.**

To create (or change) a new password, see below:

![Confirm password](image)

**NOTE**: The button changes from “Cancel” to “Confirm” when the password has been entered correctly.

**Delete a User**

To delete a user, click on the associated trashcan icon. A confirmation window will appear.
Audit Tab

All the actions performed on the system are stored by default in the audit trail log. You can monitor exactly what each user is using the system for.

Search Audit Records

Search Criteria

In the upper right corner of the table there is a small magnifying glass icon. When clicked, a pop-up window appears where you can select from the following search filters:

- **Action**: VideoXpert Plates Manager action recorded
- **Details**: Text details of the action are recorded.
- **Date from + Time from**: Will show only the activity since the selected date + time
- **Date to + Time to**: Will show only the activity until the selected date + time
- **Source address**: IP address of the user that has performed a VideoXpert Plates Manager action
- **User**: User who has performed the VideoXpert Plates Manager action
- **Failed**: Shows if the action failed or not
Search Filters

VideoXpert Plates Manager includes a fast way to use filters by adding your own search criteria as a text string. For this Audit page, a Search Filter bar is included in the Search area, where you can add or remove search filters:

Syntax is: FilterKey:FilterValue, where:

<table>
<thead>
<tr>
<th>Field</th>
<th>Filterkey</th>
<th>FilterValue</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTION</td>
<td>ACTION</td>
<td>Action, example: ACTION:GET /api/user/all</td>
</tr>
<tr>
<td>DETAILS</td>
<td>DETAILS</td>
<td>Text included in the Details attribute.</td>
</tr>
<tr>
<td>DATE FROM</td>
<td>FROM</td>
<td>DateTime format dd/MM/yyyy hh:mm:ss, example: 08/01/2018 10:22:29</td>
</tr>
<tr>
<td>DATE TO</td>
<td>TO</td>
<td>DateTime format dd/MM/yyyy hh:mm:ss, example: 08/01/2018 10:22:29</td>
</tr>
<tr>
<td>FAILED</td>
<td>FAILED</td>
<td>true or false</td>
</tr>
<tr>
<td>USER ID</td>
<td>USER</td>
<td>User ID or user username</td>
</tr>
<tr>
<td>SOURCE ADDRESS</td>
<td>SOURCE</td>
<td>IP address. example: SOURCE:192.168.0.131</td>
</tr>
</tbody>
</table>

Note: To clear search criteria use button located at the right of the Search Filter bar.
Configuration Examples

This section will cover how to configure the system for various common scenarios.

Configuration Based on a Schedule

Scenario conditions:

- VideoXpert Plates Manager system is setup for access control.
- Employees of the company shall be allowed to enter the parking lot during office hours.
- Service staff of the company shall be allowed to enter the parking lot at the weekends at any time.

Configuration: Known delivery vehicles are to be permitted access during business hours.

This scenario will be configured with a general zone, which has two cameras, one for the entry lane and one for the exit lane.

- Create a new general zone (in the CONFIGURATION main menu). We will call this zone “Main Site”.
- Create two cameras and assign them to the new zone.
- Create a new schedule. We will call this Schedule “Employees Schedule”.
  - Give the schedule the desired duration. In this example, it will be this year.
  - Set the schedule as not global.
  - Click “Save”.

- Click on the “Clock” icon in the “Employees schedule” row to open the timeframe interface.
• Select the “Office” default timeframe and click “Save”.
• Create a new schedule for the service staff. We will call this schedule “Service Staff schedule”.
  − Give the schedule the desired duration. In this example, will be this year.
  − Set the schedule as not global.
  − Click “Save”.

• Click on the “Clock” icon in the “Employees Schedule” row to open the timeframe interface.
• Create a new time frame that covers the whole weekend.
  − Set the description as “Whole Weekend”.
  − Enable ignore year.
  − Set days from 01 to 31.
  − Set hours from 00 to 23.
  − Set minutes from 00 to 59.
  − Set Days of Week to “Sun” and “Sat” only.
  − Set Months to All.
• Click “Save”
• Enable “Whole weekend” timeframe for the “Employees Schedule” and click “Save”.

• Go to “Zones” (in the “Configuration” menu) and edit “Main Site” (click on it).
• Enable both schedules on the zone and click “Save”.

---

**Time frames**

<table>
<thead>
<tr>
<th>Description</th>
<th>Start</th>
<th>Day</th>
<th>End</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole weekend</td>
<td>09:00</td>
<td>Mo</td>
<td>09:00</td>
<td>Su</td>
</tr>
<tr>
<td>Days of week</td>
<td></td>
<td>Mo</td>
<td></td>
<td>Su</td>
</tr>
<tr>
<td>Months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PELCO**

VideoXpert Plates Manager - Schedule

**Time frames of Employees Schedule**

<table>
<thead>
<tr>
<th>Description</th>
<th>Start</th>
<th>Day</th>
<th>End</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Site</td>
<td>08:00</td>
<td>Mo</td>
<td>08:00</td>
<td>Su</td>
</tr>
<tr>
<td>Office</td>
<td>08:00</td>
<td>Mo</td>
<td>08:00</td>
<td>Su</td>
</tr>
<tr>
<td>Area 1</td>
<td>08:00</td>
<td>Mo</td>
<td>08:00</td>
<td>Su</td>
</tr>
<tr>
<td>Area 2</td>
<td>08:00</td>
<td>Mo</td>
<td>08:00</td>
<td>Su</td>
</tr>
</tbody>
</table>

**PELCO**

VideoXpert Plates Manager - Schedule

**Description**

<table>
<thead>
<tr>
<th>Description</th>
<th>Start Time</th>
<th>End Time</th>
<th>Status</th>
<th>Days</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Site</td>
<td>08:00-10:00</td>
<td></td>
<td>Active</td>
<td>Mo</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>08:00-10:00</td>
<td></td>
<td>Active</td>
<td>Mo</td>
<td></td>
</tr>
<tr>
<td>Area 1</td>
<td>08:00-10:00</td>
<td></td>
<td>Active</td>
<td>Mo</td>
<td></td>
</tr>
<tr>
<td>Area 2</td>
<td>08:00-10:00</td>
<td></td>
<td>Active</td>
<td>Mo</td>
<td></td>
</tr>
<tr>
<td>Area 3</td>
<td>08:00-10:00</td>
<td></td>
<td>Active</td>
<td>Mo</td>
<td></td>
</tr>
<tr>
<td>Area 4</td>
<td>08:00-10:00</td>
<td></td>
<td>Active</td>
<td>Mo</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

<table>
<thead>
<tr>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Site</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td></td>
</tr>
<tr>
<td>Area 1</td>
<td></td>
</tr>
<tr>
<td>Area 2</td>
<td></td>
</tr>
<tr>
<td>Area 3</td>
<td></td>
</tr>
<tr>
<td>Area 4</td>
<td></td>
</tr>
</tbody>
</table>
Now create the authorizations associated with the users. In this example, create two authorizations. User “Tom” is an employee with plate number “ANM7386”, and user “Brenda” is service staff with plate number “PNG123”. User “Max” is both an employee and a service staff user with plate number “2345ZZW”.

- Go to the AUTHORIZATIONS menu to create a new authorization.
- Add a new Authorization for the plate “ANM7386”.
- On the Zone and Schedule menu enable “Main Site” and “Employees Schedule”.
- Add an active period and click Save.
- Repeat the operation for the user “Brenda” (Plate PNG123).
Repeat the operation for user “Max” (Plate 2345ZZW) – remembering to add the plate to both schedules:

The example configuration is complete.

**Configuration Based on a Zone**

Scenario conditions:
- VideoXpert Plates Manager will be used as an access control system.
- There is a main area where every car shall be allowed to pass during office hours.
- There is a satellite (nest) area where only “Employees” shall be allowed to enter.

Configuration:
- Create a new zone. We will call it “Main Area”. Click “Save”.

[Image of zone configuration]
• Create another zone. We will call it “Satellite area”. Click “Save”.

• Create the desired cameras and assign them to the zones.

• Create a new schedule. We will call it “Main area schedule”.
  − Define the duration from 2019 to 2022.
  − Set the schedule as global.
  − Click “Save”.

• Click on the timeframe icon and enable the “Office” timeframe. Click “Save”.

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• Create a new schedule. We will call it “Satellite Area Schedule”.
  − Set the duration until 2022.
  − Make this schedule not global.
  − Click “Save”.

• Click on the timeframe icon for the new schedule and enable the “Always” timeframe. Click “Save”.

• Assign the schedule “Main Area Schedule” to the zone “Main Area”. (Select the zone & use the drop-down of Schedules). Click SAVE.
• Assign the schedule “Satellite Area Schedule” to the zone “Satellite Area” (as above).

• Create the desired authorizations for the “Employees” on the Satellite area. As in the previous example – go to the AUTHORIZATIONS and add or edit plates. Add them to relevant Zones and Schedules.
The example configuration is complete.

**Setting Up a Car Park Where Only Known Vehicles Can Open the Barrier Using a Relay (Actuator)**

**Scenario conditions:**
- VideoXpert Plates Manager will be used as an access control system.
- There is a car park where every “Employee” car shall be allowed to enter.
- Unknown vehicles will not open the barrier.

**Configuration:**
- Create a new schedule. We will call it “Schedule 1”.

**Configuring a Zone Which Inherits Settings From a Parent Zone**

**Scenario conditions:**
- VideoXpert Plates Manager will be used as an access control system.
- There is a main area where every “Employee” and “Manager” car shall be allowed to enter.
- There is a satellite area where only “Manager” cars shall be allowed to enter.

**Configuration:**
- Create a new schedule. We will call it “Schedule 1”.
  - Define the duration from 2019 to the end of 2021.
• Create a new zone called “Satellite area”.
  – Assign “Schedule1” (just created) to it. (If they are allowed, all cars can access this area for 3 years.)

• Create a new zone called “Main area”.
  – Assign the “Schedule1” to it also.
  – Assign “Satellite area” as a parent of this area.
  – Enable Inherit Schedules.

• Create two white lists, one called Employee and one called Manager.
  – Associate Employee with zone “Main Area”.
  – Associate Manager with zone “Satellite Area”.
The main difference being illustrated in this example is that any authorization given for the satellite area will also apply to the Main area, even if it is not specifically enabled for this zone by the authorization itself.
When configuring the alerts via email, there are several reserved words that you can use to customize the message or header:

<table>
<thead>
<tr>
<th>Reserved Word</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$timestamp$</td>
<td>Sequence of characters denoting the time and date the reading event occurred, the format is &quot;yyyy-MM-ddTHH:mm:sszzz&quot;</td>
</tr>
<tr>
<td>$platenumber$</td>
<td>Returns the license plate number read.</td>
</tr>
<tr>
<td>$cameraname$</td>
<td>Returns the name of the camera that made the recognition.</td>
</tr>
<tr>
<td>$cameraid$</td>
<td>Returns the camera ID.</td>
</tr>
<tr>
<td>$confidence$</td>
<td>Returns the confidence of the read license plate.</td>
</tr>
<tr>
<td>$charheight$</td>
<td>Indicates the height of the character on the license plate.</td>
</tr>
<tr>
<td>$latitude$</td>
<td>Returns the latitude coordinates of the read plate.</td>
</tr>
<tr>
<td>$longitude$</td>
<td>Returns the longitude coordinates of the read plate.</td>
</tr>
<tr>
<td>$speed$</td>
<td>Returns the speed of the vehicle recorded by the recognition system. Not Currently Supported.</td>
</tr>
<tr>
<td>$zone$</td>
<td>Returns the area in which the plate was read.</td>
</tr>
<tr>
<td>$zoneid$</td>
<td>Return zone ID in which the plate was read.</td>
</tr>
<tr>
<td>$description$</td>
<td>Adds the alarm description in case of a blacklist trigger.</td>
</tr>
<tr>
<td>$comments$</td>
<td>Adds the comments of the alarm from a blacklist trigger.</td>
</tr>
<tr>
<td>$hitcount$</td>
<td>Shows the number of the hits for this plate on the blacklist.</td>
</tr>
</tbody>
</table>
Pelco Troubleshooting Contact Information

If the instructions provided fail to solve your problem, contact Pelco Product Support at 1-800-289-9100 (USA and Canada) or +1-559-292-1981 (international) for assistance. Be sure to have the serial number available when calling.

Do not try to repair the unit yourself. Leave maintenance and repairs to qualified technical personnel only.