NOTE: This guide is strictly for the Vaxtor On-Camera analytic package. A second guide will be released with improvements to the Vaxtor Desktop application.

Overview

ExacqVision integrates with VaxALPR software, allowing license plate images and associated data to be monitored from the exacqVision client. This document will assist in setting up the communication between VaxAPLR and exacqVision over a local area network (LAN). The information provided within this document will assist in integrating Vaxtor ALPR with exacqVision and explore some of the features offered with the integration, including live viewing of license plate captures, playback with associated plate data, line masking, hotlists and configuration of the features.

Prerequisites

- Understanding of exacqVision and Vaxtor ALPR software.
  - For questions about the VaxALPR software installation, contact Vaxtor
  - For questions about the exacqVision installation, see the documentation provided on Exacq.com

Minimum Software Requirements

The Vaxtor integration in this guide was tested with the following version of exacqVision and Vaxtor ALPR:

- Microsoft Windows 7 or later (64bit)
- Microsoft Visual C++ 2015 Redistributable Package (x64)
- MS Framework 4.5.2
- exacqVision version 19.06 or later
- Professional or Enterprise license for ExacqVision software.
- Vaxtor software : VaxALPR 4.0, and VaxALPR Lite
- Valid VaxALPR license (contact Vaxtor)
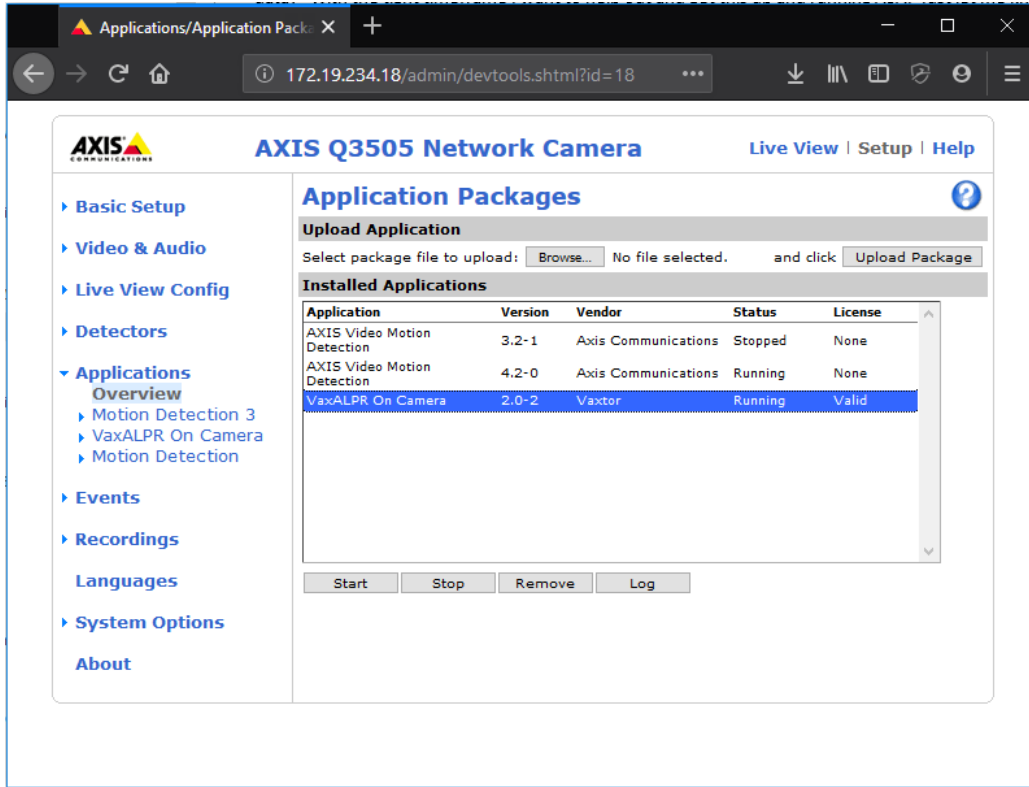
2 Methods for ALPR results

This document will cover configuring and running the Vaxtor License Plate Recognition application in **only 1** of 2 ways.

1. The on-camera analytic installed on the camera itself, in this case, Axis cameras.
2. The desktop applications, VaxALPR 4.0 and VaxALPR Lite

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Obtaining and Installing the On-Camera Software Package

1. Download the correct version of "VaxALPR On Camera" for your camera's ARTPEC chip.
   a. More information and downloads can be found at https://www.vaxtor.com/vaxalpr-on-camera/
2. Open a web browser and navigate to the camera's IP address
3. Upload the downloaded file to install the application

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Setup

4. Once the package is installed and running, double click on it in the Installed Applications window.
5. On the next page, click "VaxALPR On Camera settings"
6. Next, click the 3 navigation bars in the top right to show the context menu. Click **Setting**
7. In the following pages you will configure all parameters with which VaxALPR will analyze plate data.
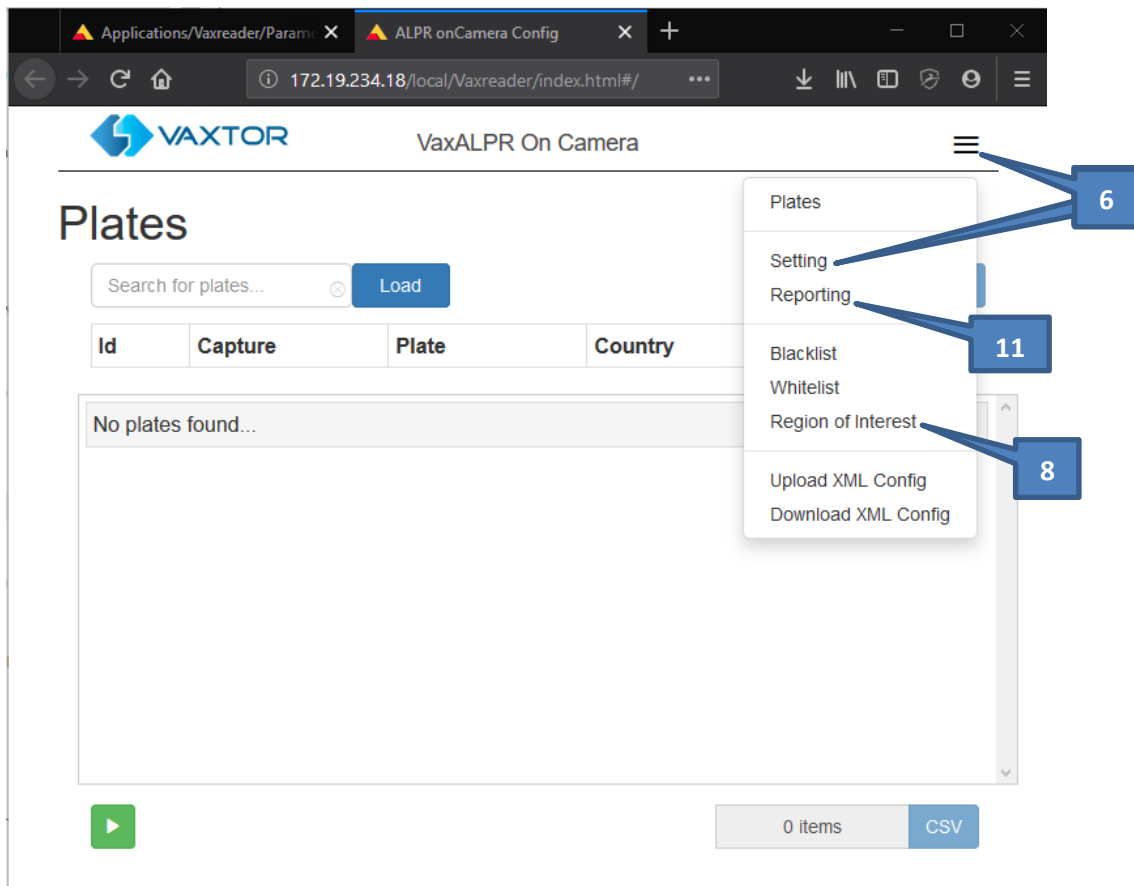
8. When that is complete, go to the dropdown menu from point 6 again, click **Region of Interest.**
9. Define the areas of the video scene that will register license plates. This page also allows you to differentiate between areas that are included or excluded from analysis.
10. Click **Confirm ROI** and then **Submit ROIs** to save your changes.
11. Click the 3 bar navigation menu again, click **Reporting**
12. Under the **TCP Server** tab In the **Port** section, choose a port number through which the camera will communicate serial data. Note: this same port number must be applied in the serial connection in exacqVision later.
13. In the **Message** section, choose the data you want to see reported. This screenshot below is an example. For more details on what information can be obtained here, refer to documentation provided by Vaxtor or contact their tech support.

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VAXTOR   VaxALPR On Camera   ≡

Reporting

A1001

Vaxtor protocol

Overlay

Dorlet

Write result

Vapix

TCP

TCP SERVER

☑ Active

Port   **12**

12388

Message   **13**

Date: $date$, Plate: $plate$, Country: $country$\n

JSON

XML

FTP

ACS

Pushbullet

UTMC

NEDAP protocol

Submit Reporting   Plate to test....   Test Reporting

At this point your camera is ready to capture license plates.

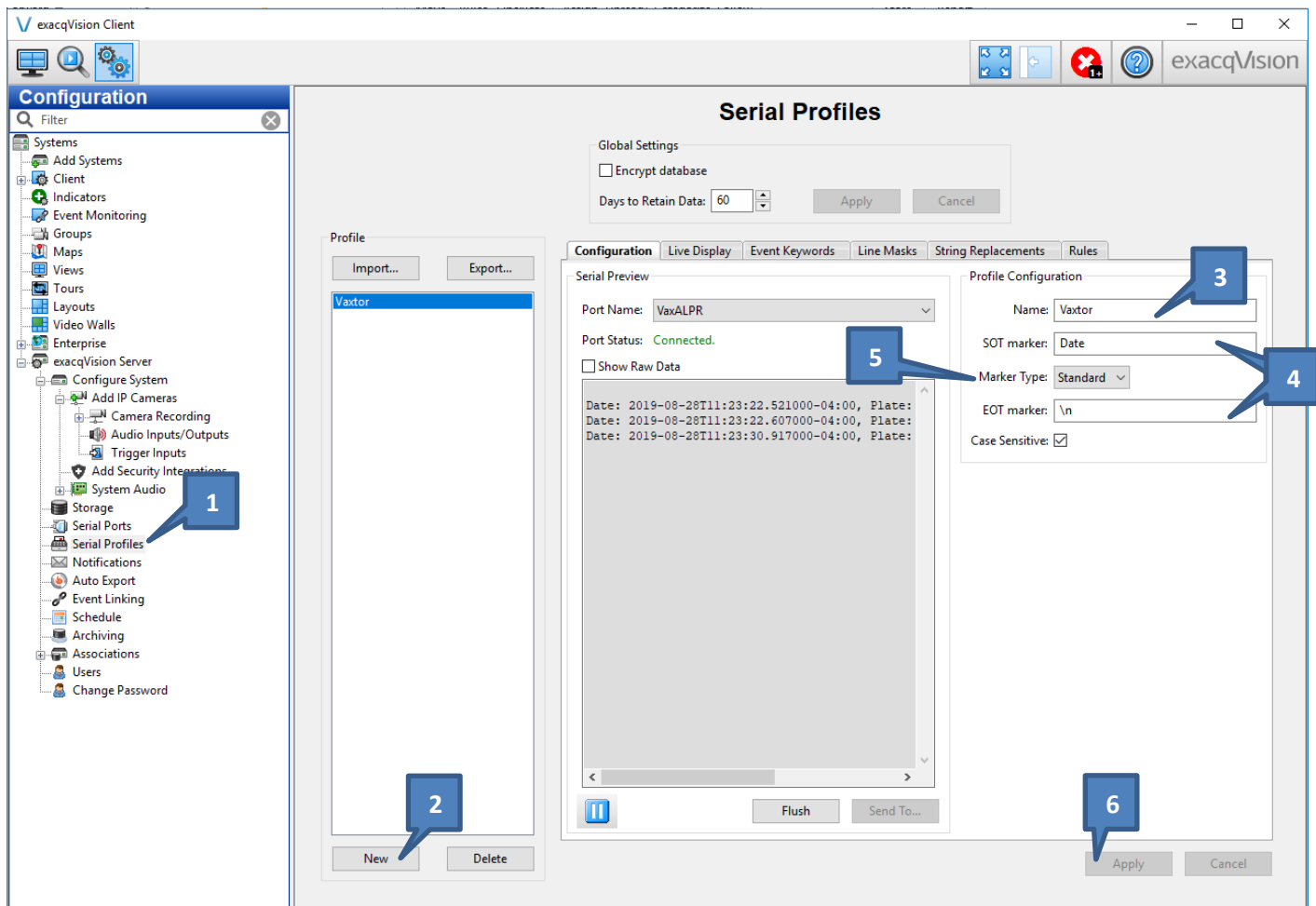**Further configuration, including whitelist/blacklist, is optional.**

exacqVision Configuration
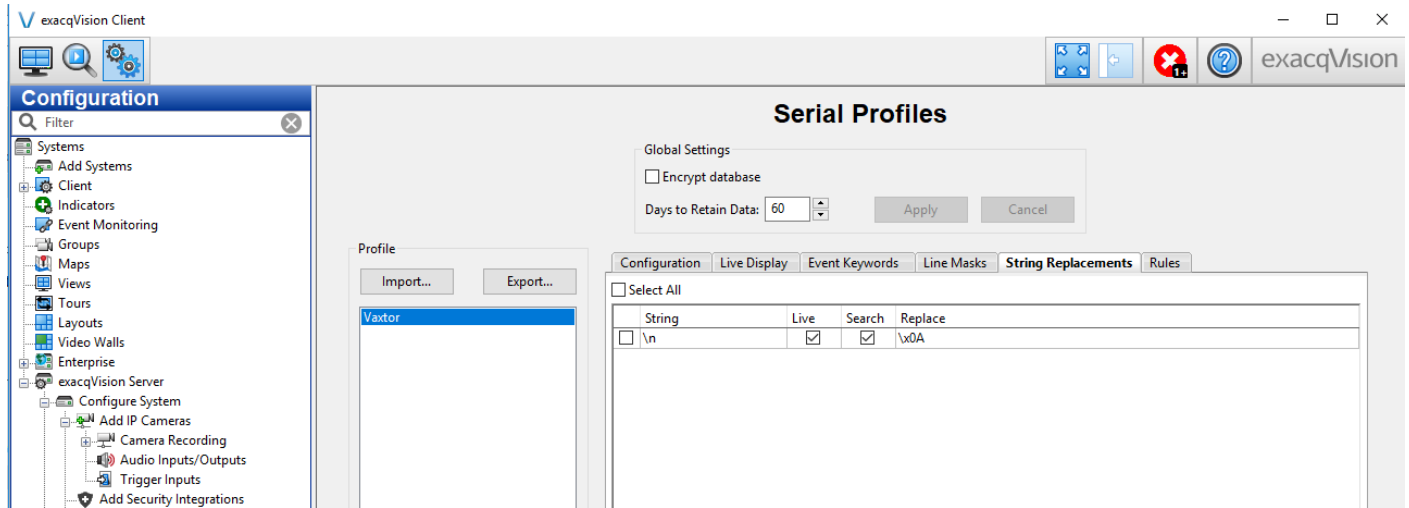
Adding a Serial Profile

Serial profiles are used along with the serial ports in order to define the SOT marker and marker type for the metadata.

1. On the exacqVision server, select **Serial Profiles** from the tree.
2. Under the **Profile** section of the navigation tree, select **New**.
3. Enter a **Profile Name**, such as Vaxtor.
4. Enter the **SOT marker** "Date" and **EOT marker** " \n " (remove quotation marks) NOTE: The SOT follows the example Message data shown in the screenshot above. This can be customized. The "\n" will be explained in the section on String Replacement.
5. Select the **Marker Type** dropdown to be Standard.
6. Click **Apply**.

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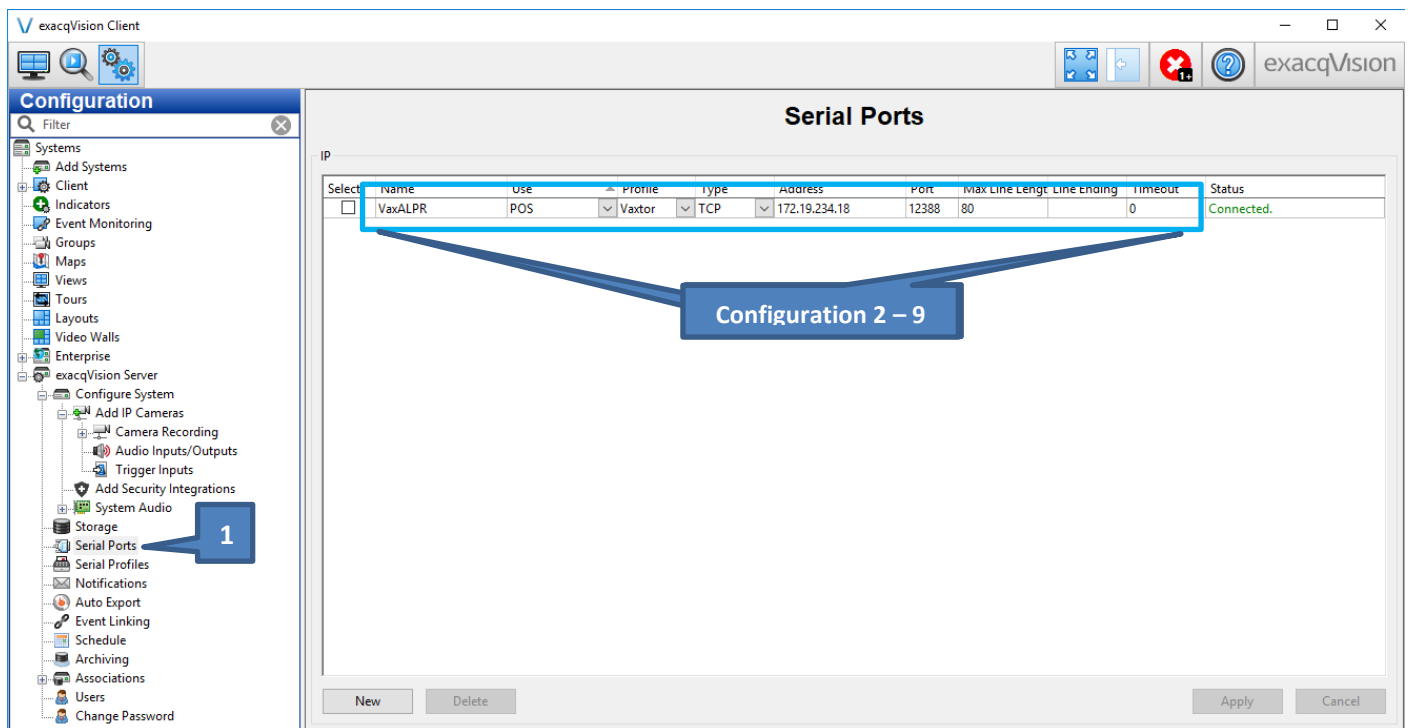Page 5 of 9
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String Replacements

In the **String Replacements** tab**,** set the string replacement as shown below. This matches the messages section of the camera configuration shown above. This will cause a new line of data to be organized more neatly. Note that these are just examples and can be customized if needed.

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Configuring Serial Ports

Serial ports are configured to receive data from ALPR so the metadata can be processed and stored. This metadata can also be viewed during a live stream or during the playback.
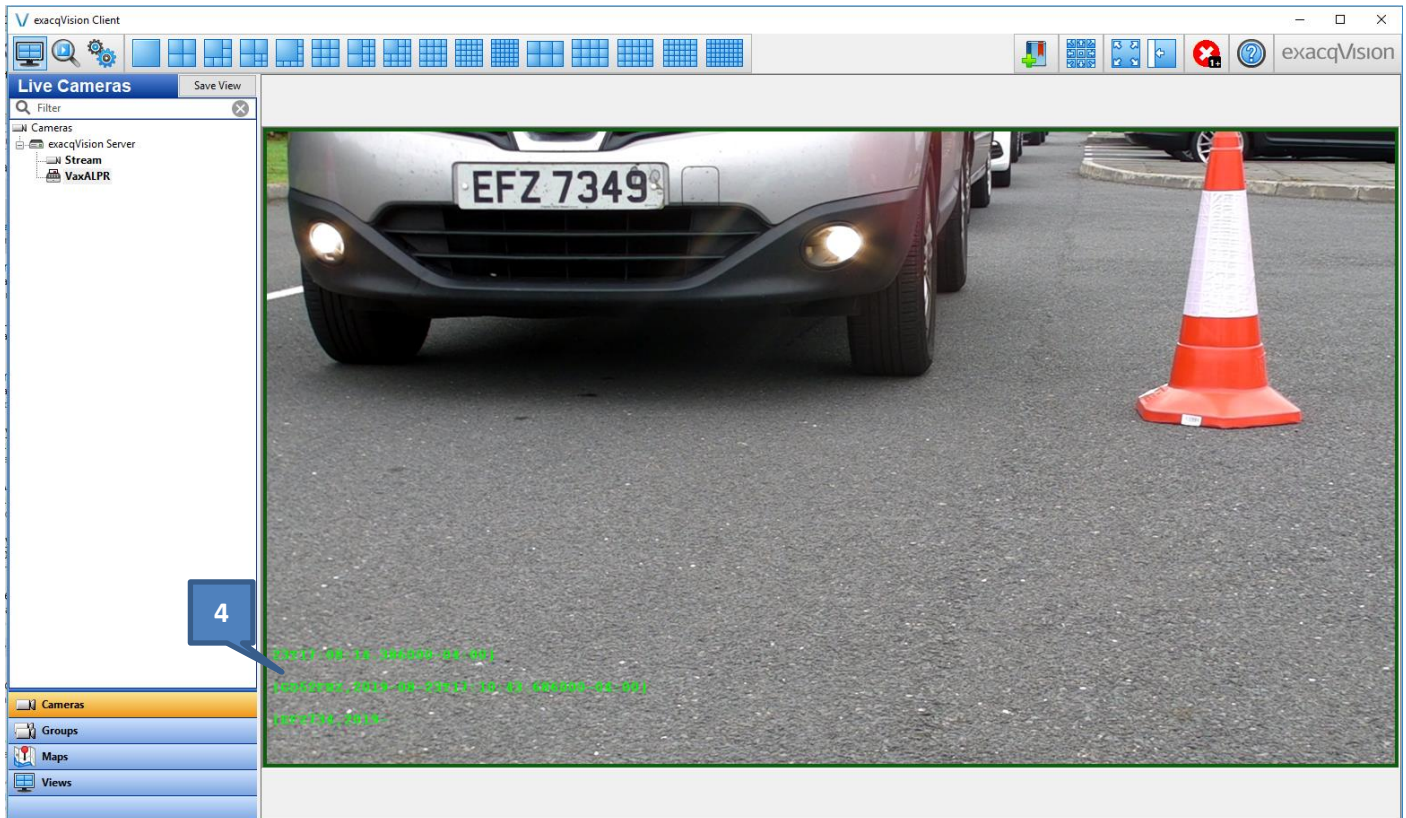
1. Select the **Serial Ports** tab, directly above the **Serial Profiles** tab. Click **New**
2. Create a **Name** for the serial port.
3. Under the **Use** column, select **POS**.
4. Under the **Profile** column, select the profile you created in the last page.
5. Under the **Type** column, select **TCP** .
6. Under the **Address** column, enter the IP address of the Vaxtor machine. If both are running on the same machine, use the IP address of the exacqVision server.
7. In the **Port** column, enter the **Port Number** that was defined in the VaxALPR setup under the **Results Publishing Configuration** page in the desktop application or under **Reporting > TCP Server** settings in the "On Camera" application in the camera's web interface.
8. Enter **80** under the **Max Line Length** column.
9. Enter "**0**" in the **Timeout** column and click **Apply** when finished.

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Streaming Live Video

A live video stream can be configured to view the camera in real time. The metadata can also be used as an overlay to the stream so results can be displayed during the live stream.

1. To view the live stream, click on the top left button **Live Page**.
2. After this, a viewing mode can be selected via the tiling options on the top.
3. Drag the desired stream into one of the boxes.
4. The license plate data can also be dragged into its own box or the box with the stream. If placed in the box in the screen, it will act as an overlay like in the following screenshot. (font can be configured in the Serial Profiles) page.

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Viewing Playback

Recorded video can be accessed through the playback feature. Similar to the live stream feature, the metadata can be used as an overlay in the video.

1. To playback video and look for events, click the **Search Page** button to the right of the **Live Page** button.
2. Under **Search Cameras**, select the stream to search and the desired POS.
3. Enter a time range with a start time and end time.
4. Click **Search**.
5. The stream can be zoomed in or out to focus on certain events. Use the media buttons to fast forward, reverse, pause, etc.

Contact info and Support

Vaxtor Support (Technical Support, Customer Service, Sales, and more)

https://www.vaxtor.com/contact/

Exacq Support (Technical Support, Training tools, and more)

https://exacq.com/support/

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