

Overview

Hanwha cameras use a license plate analytic from The FF Group. The data from these license plate captures can be viewed in the exacqVision Client as text, sent as serial over IP. This document will briefly explain how to set up this integration.

VITAL NOTE : There are separate versions of the plate recognition application for EU and US plates.

Please be sure to obtain the correct version for your needs.

For more information, visit <https://ff-group.org/hanwha/>.

Tested versions:

ExacqVision: versions 19.12 and 20.03

Camera: [XNV-6120R/LPR](#) (firmware 1.40.02_20191028_R375)

NumberOK Edge analytic application: 5.1.23 (EU and US versions)

Installation Process

1. Mount the camera per the installation manual found [here](#).
2. Download the NumberOK Edge software and instructions [here](#).
3. Install the application to the camera following the Open Platform Setup on page 60 in the guide linked in step 1.
4. Once the application is up and running, you can configure how it sends data to exacqVision.

Configuration

Open the camera's web interface. Navigate to *Setup > Open Platform > Go App*

The screenshot shows the WISENET web interface for an XNV-6120R camera. The 'Open platform' section is active, displaying a table of installed applications. The table has columns for 'No.', 'Application name', 'Status', and 'Setup'. One application is listed: 'NumberOkEdgeHanwha' (No. 1), installed on 2020-02-20 at 22:35:36, with version 5.1.23. The status is 'Running...' and it has 'High' priority and 'Auto start' enabled. The 'Setup' column shows radio buttons for 'Low' and 'Medium' priority, and a checked checkbox for 'Auto start'. Buttons for 'Uninstall', 'Go App', 'Stop', and 'Health' are present for this application. The total number of applications is 1.

numberok
EDGE NumberOK EDGE
License Plate Recognition application Version 5.1.23.663.492

Events Search **Settings**

MAC Address : 00166CFB7CC6

License status: LICENSE ACTIVATED

SD-Card status:NOT PRESENT

Save settings

Recommended settings

Min plate width px: 130

NVR integration: 172.19.232.135 9091


JSON via HTTP(s) integration

Geo Latitude : Destination URL : 172.19.232.135:9091

Geo Longitude : Camera ID : CAM_00166CFB7CC6

1. Input the IP address of the ExacqVision server.
2. Choose a port number that will be used to communicate with ExacqVision.
3. Check the box for "JSON via HTTP(s) integration" to send the plate data.
4. Supply the URL of the destination of where this JSON file data will be sent. In this example, it is the same LAN address and port number as the NVR. In certain network configurations this may look different.

(configuration continued)

5. Select **Crop Frame**
6. Ensure that **“No Action”** is selected ensure that JPEG snapshots of the license plate capture are not sent to exacqVision as this image data cannot be processed in this way.
7. Go back to the top of this page and click 

You can confirm the license plate captures are occurring by viewing the **Events** section of this page. Note the warning in the red banner. This can delay events being communicating to exacqVision.


numberok
EDGE











NumberOK EDGE
License Plate Recognition application
Version 5.1.23.663.492

Events

Search
Settings

This mode is provided for setup purposes only.
 It is not intended for continuous monitoring as video process affects camera and application performance a lot.



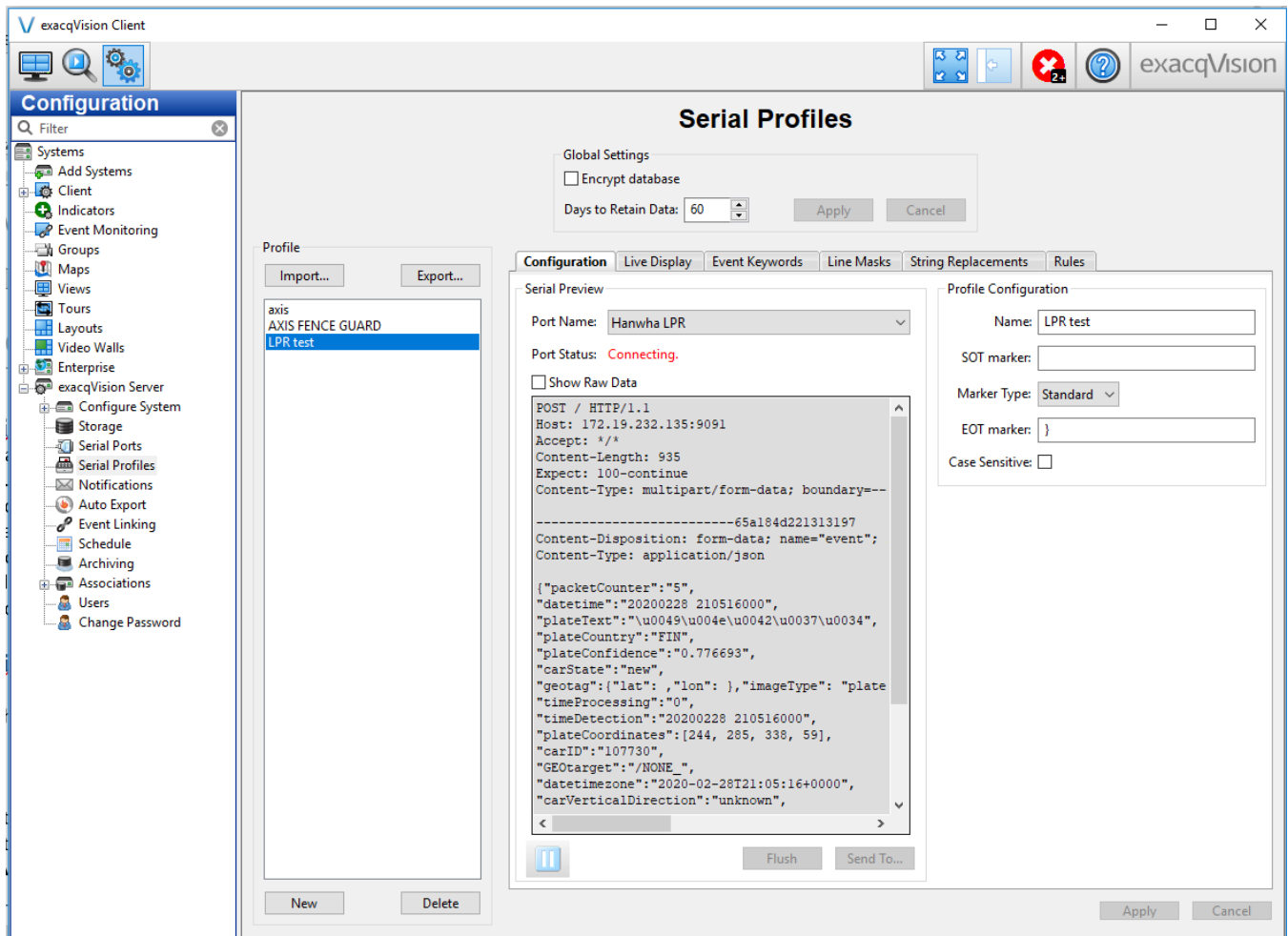
Date & Time	Plate	List	Action	Direction	Photo	Country
28/02/2020 18:49:31	INB74	Not in list		Unknown		FIN
28/02/2020 18:44:05	INB74	Not in list		Unknown		FIN
28/02/2020 18:42:53	INB74	Not in list		Unknown		FIN
28/02/2020 18:30:53	INB74	Not in list		Unknown		FIN
28/02/2020 18:29:35	INB74	Not in list		Unknown		FIN
28/02/2020 18:29:31	INB74	Not in list		Unknown		FIN
28/02/2020 18:29:23	INB734	Not in list		Up		DEU
28/02/2020 18:28:58	INB75	Not in list		Up		---
28/02/2020 18:28:30	INB74	Not in list		Up		FIN
28/02/2020 18:28:02	INB74	Not in list		Unknown		FIN



exacqVision Serial Profile Configuration

To create a Serial Profile, navigate to the section of the exacqVision Client shown in the screenshot above.

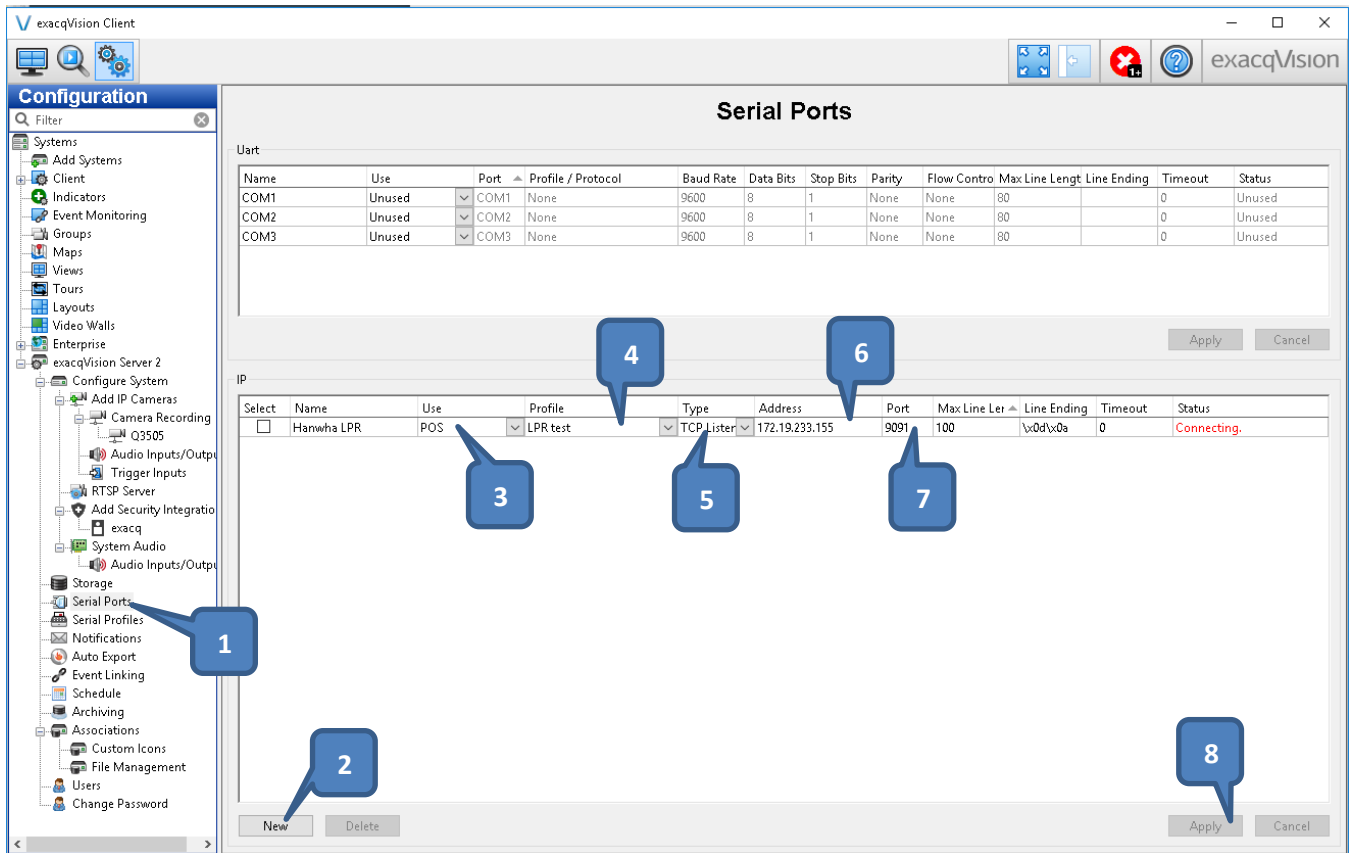
1. Click **New** in the bottom left corner.
2. Create a name for your profile that will be used on the Serial Ports page. Example: **LPR test**
3. Though SOT and EOT can be used here, for this example only “}” is needed.
4. Select **Standard** from the Marker Type section.
5. Click **Apply**



In the **Event Keywords** tab you can choose keywords from this data that can trigger other events and actions within the exacqVision system. This will be further explained below.

exacqVision Serial Port Configuration

1. Click on **Serial Ports** in the left navigation tree.
2. Click the **New** button in the bottom left corner, and enter a Name for the Serial Port.
3. Select **POS** from the Use dropdown menu.
4. From the **Profile** dropdown menu, select the serial profile name you created.
5. Select **TCP Listener** from the type dropdown menu.
6. Enter the **IP Address** of the **Hanwha LPR Camera** in the Address field.
7. Enter the configured **port number** into the Port field. For this example, 9091 was used.
8. Click **Apply**.



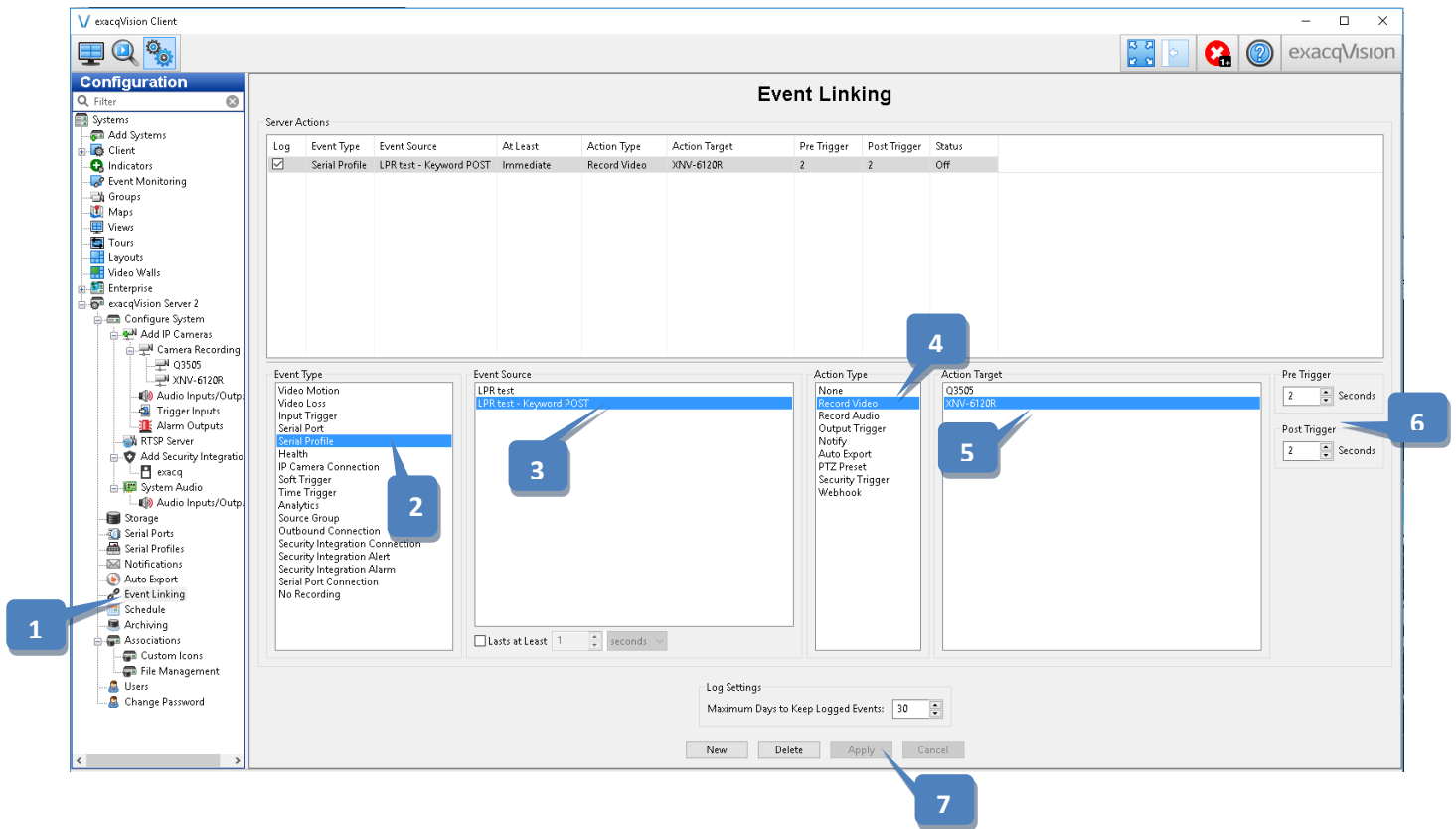
The resulting data stream will appear in the Serial Profiles page. It can also be configured as a text overlay when viewing live video.

NOTE: For more information on configuring various aspects of serial data including String Replacement, Line Masking, and Event Keywords, see our [serial data guide](#).

Event Linking

ExacqVision can use the analytic events from Hanwha LPR to trigger various actions such as recording video on a specific camera. To configure this:

1. Go to the **Event Linking** section of the exacqVision Configuration page. Click **New**.
2. Select **Serial Profile** (or Serial Port) under Event Type.
3. Select the Hanwha LPR licensed camera from the **Event Source** list.
4. Select the desired action from the Action **Type** list.
5. Choose the corresponding camera for that event from the Action **Target** list.
6. Determine your desired **Pre** and **Post** trigger timing.
7. Click **Apply**



Support Contacts

(Technical Support, Training tools, and more)

ExacqVision

<https://exacq.com/support/>

FF Group LPR App on Hanwha

<https://ff-group.org/hanwha/#Contact>

Hanwha Cameras

<https://www.hanwhasecurity.com/cs/>

