ACTi ALPR Server 1

User's Manual
Version 1.0.1

www.acti.com

2014/10/06

About This Manual

Conventions Used in This Manual

The following are typographic conventions used in this manual:

- **Bold**: Bold typeface is used for a keyword, major functions of ACTi ALPR Server 1, or a title of a section/column.
- *Italic*: Italic typeface is used for a filename or location path.
- Underlined: Underlined typeface is used for a document name or hyperlink.
- "**Bold**": Bold interface enclosed in double quotation marks indicates the name of a button, a menu or a choice item.

Some notices are placed within the following boxes; each type of the box indicates different purposes or levels of importance for system:

Important Notice

The content within this box is an **important notice**. This notice is important for you to get certain functions to work properly, or to prevent from certain potential problems that may damage your system. Make sure you read this notice and follow the instructions.

Note

The content within this box is a **note**. A note is some necessary information you need to know about the action you are currently taking, like what will happen after you follow or don't follow certain procedure.

Tip

The content within this box is a **tip**. A tip gives you an alternative method to easily or quickly achieve an objective, usually for specific conditions.

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Legal Notice

Disclaimer

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- The information contained herein is subject to change without notice.

- The English version of this document is the official one for all purpose. All the translated versions are provided as a convenience. Any discrepancies or differences created in the translations of any other languages are not legally binding.

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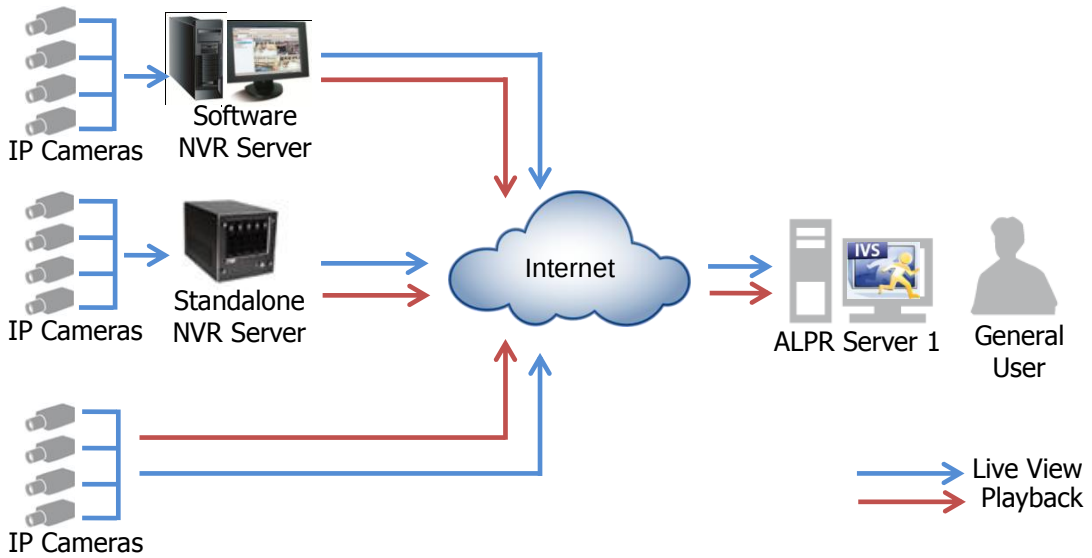
Introduction

Product Overview

Applying Automatic License Plate Recognition (ALPR) technology, ACTi now helps you build a smarter surveillance system. **ACTi ALPR Server 1** is a video analytics software designed to detect and recognize vehicle license plates. This software is able to automatically locate and read license plates appearing in a certain area to provide efficiency in parking and traffic control, as well as law enforcement. Once a license plate is recognized, users can browse through them to play back footages or export the footages to use as evidence or future references.

System Architecture

The service architecture is described in the following figure:



PC Hardware Requirements

The performance of live display quality is largely determined by the computer hardware capability and the number of live channels. The table below provides basic guidelines for selecting proper hardware for the computer that installs **ACTi ALPR Server 1**.

PC Spec	Recommended
CPU	Intel Core i7 Processor
RAM	4GB [1]
Operation System	Windows 7, Windows 8 [2]
Screen Resolution	800x600
Network	Ethernet 1000 Base-T

[1] Please use 64-bit system if your computer has more than 4GB RAM. Windows operating system has limits on memory and address space regardless of the real or virtual memory available on a particular computer. Take Windows 7 Professional for example, the maximum physical memory for a 32-bit(X86) system can address is 3.5 GB even though 16 GB of RAM has been installed on this computer. Therefore, if you consider increasing the computer's multi-tasking capability by adding more RAM, you will need a 64-bit version of Windows to take advantage of it all.

Please visit the link below for more memory limitations on various Windows platforms.
http://msdn.microsoft.com/en-us/library/aa366778%28VS.85%29.aspx#physical_memory_limits_windows_7

Besides the limitation mentioned above, you may find the usable memory of your computer displayed here: → **Computer** → **Properties** is still less than actual installed memory.

This is a common symptoms of all Windows platforms, please find explanations and solutions in this Windows official support document http://support.microsoft.com/kb/978610/en-us and http://windows.microsoft.com/en-us/windows7/taking-the-mystery-out-of-64-bit-windows

[2] Please make sure your operation system is fully patched with the latest service packs.

Getting Started

Pre-requisites

Before installing **ACTi ALPR Server 1**, please make sure the pre-requisites below are fulfilled:

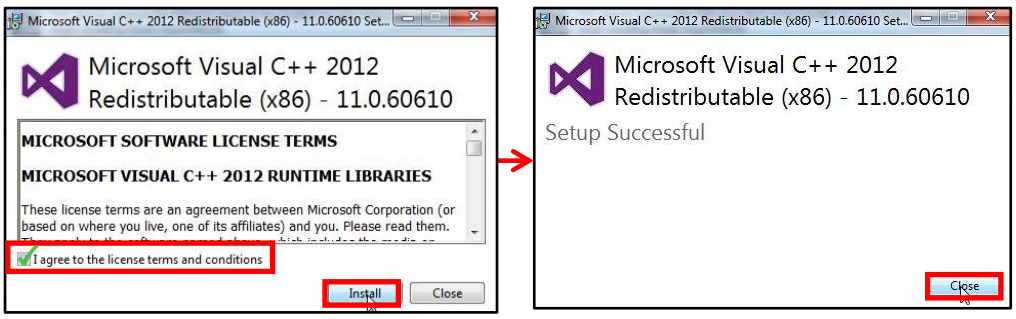
1. Ensure that your computer meets the minimum system requirements.
2. Ensure that your computer has a **C Drive**.
3. Ensure that you have enough storage space on your computer to save video recordings of recognized license plates.

Installing the Program

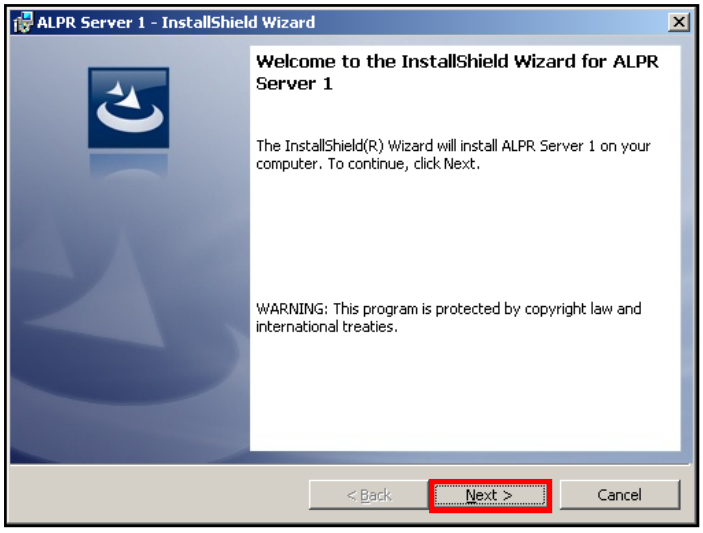
The program installation can be simple and intuitive by following the installation wizard's instructions. The program can be used right after installation is completed, without the need to restart the computer.

To install the software, follow the steps below:

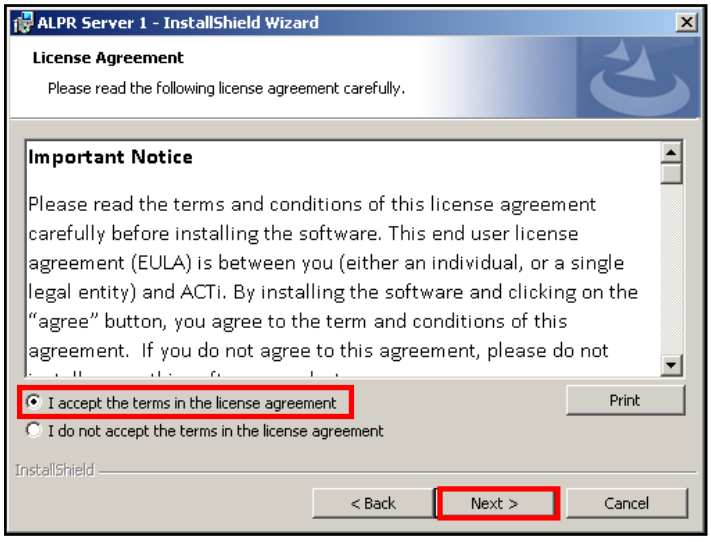
1. Find the IVS Server 1 compressed file that you downloaded and extract it.
2. Execute the install shield application .
3. If prompted by the **InstallShield Wizard** to install **Microsoft Visual C++ 2012 Redistributable Package**, follow the on-screen instructions to do so, as it is crucial for the proper functioning of the program.



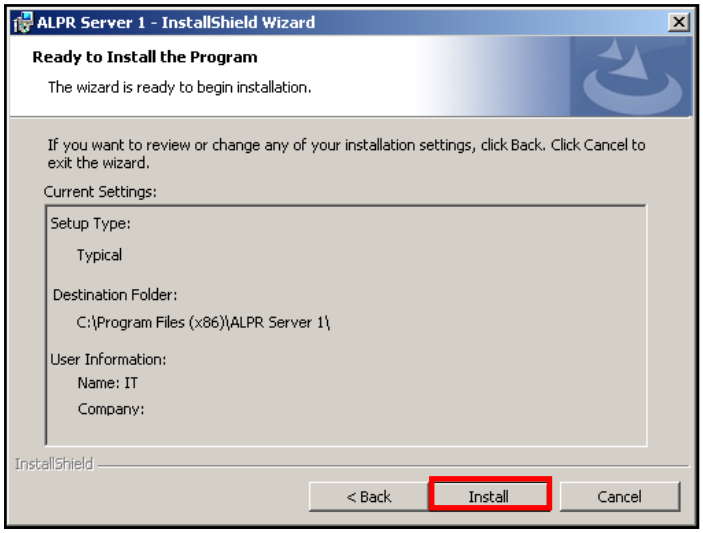
4. Proceed by following the on-screen instructions of the **InstallShield Wizard**.



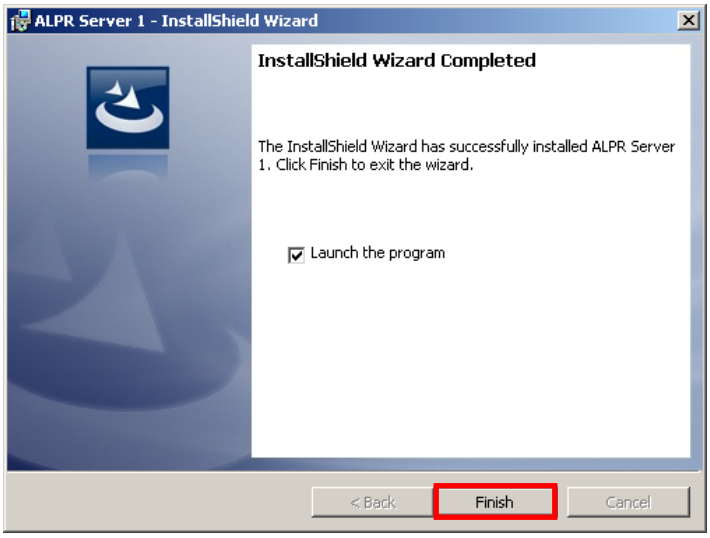
5. Proceed by reading and agreeing to the license agreement and click "**Next**".



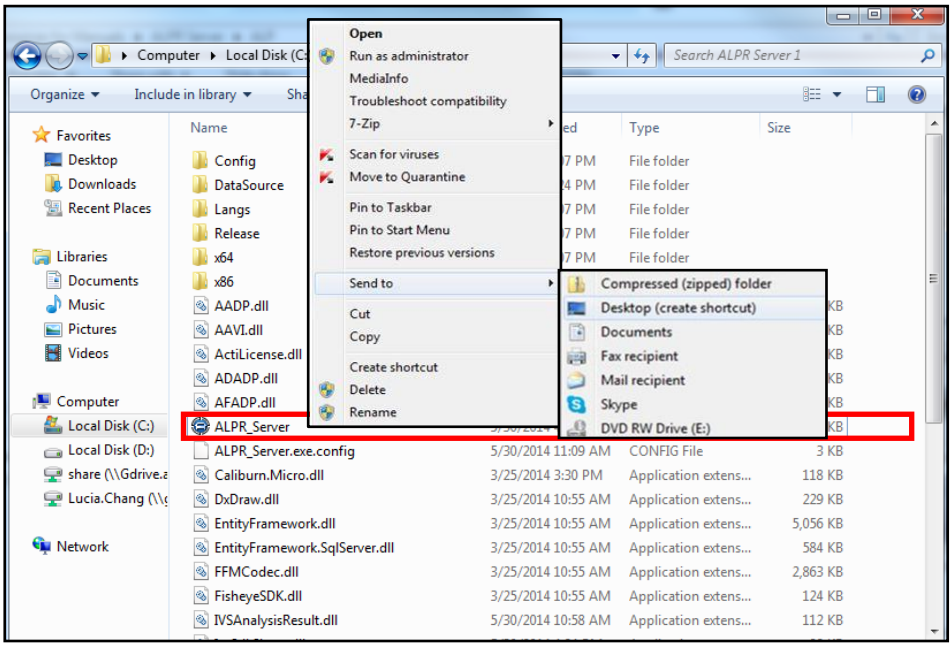
6. Double-check your installation settings, and click "**Install**".



7. The installation process is done. Click **"Finish"**.



8. Open the file by clicking on the ALPR Server1  shortcut on your desktop. If you can't find a shortcut on your desktop, create your own shortcut by finding the ALPR_Server file under C:\Program Files\ALPR Server 1, **right click**, select **"Send To"**, and select **"Desktop (create shortcut)"**.



License and Activation

In the ALPR Server 1 system, your required number of channels should be licensed and activated before connecting. License activation is the process of unlocking the channels on ALPR Server with the received **License Key**. **License Key** is a serial number delivered as a printed card or an E-mail after the purchase is carried out. After the license activation, the channels on ALPR server will automatically become available.

During license activation, your **License Key** is matched against the MAC address of the Network Interface Card (NIC) on NVR server computer. Once this license key is used by the computer with given MAC, it cannot be activated with another MAC. This matching record will be stored on the ACTi license data server. If your computer has more than one network cards, NVR server will detect them and provide you a dropdown list to select from.

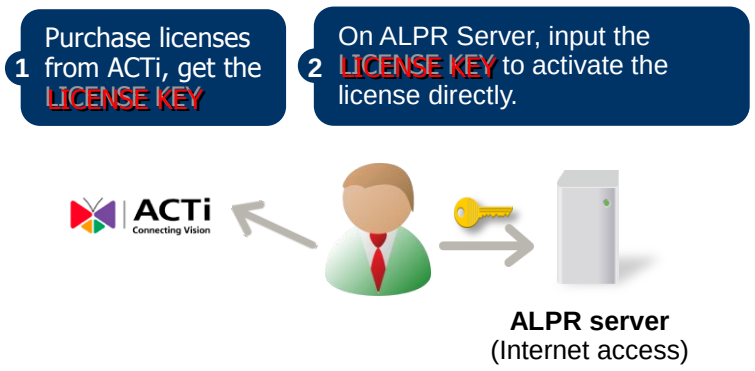
Please note:

- The license is cumulative and perpetual.
- The license is not version-specific, upgrading software version will not influence the existing license(s) you have.
- The maximum number of channels that can be managed by ALPR Server 1 is **4**.

There are two ways to activate the licenses depending on your ALPR server network condition: **Online Activation** and **Offline Activation**.

Online Activation

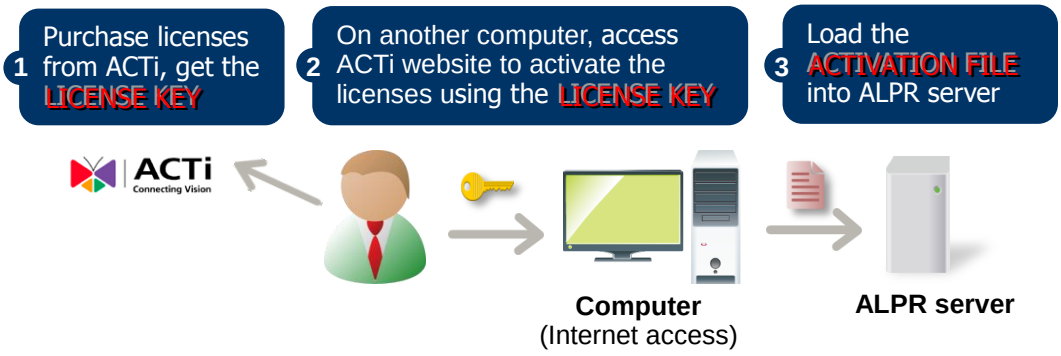
If your ALPR Server 1 computer has available Internet access, choose online activation.



ALPR server
(Internet access)

Offline Activation

Offline activation does not require Internet access for ALPR server. It is used when ALPR is located in a network not connected to public Internet (e.g. in a military base). You will need to get an activation file from another computer and transfer it to the ALPR server computer.

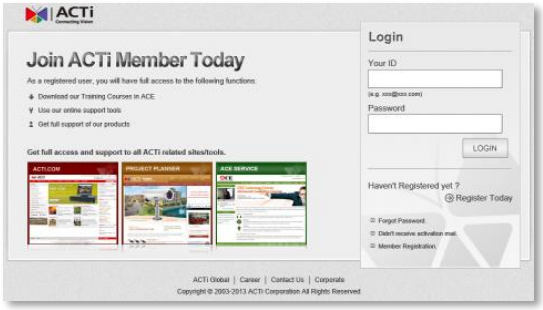


Step-by-step Activation Process

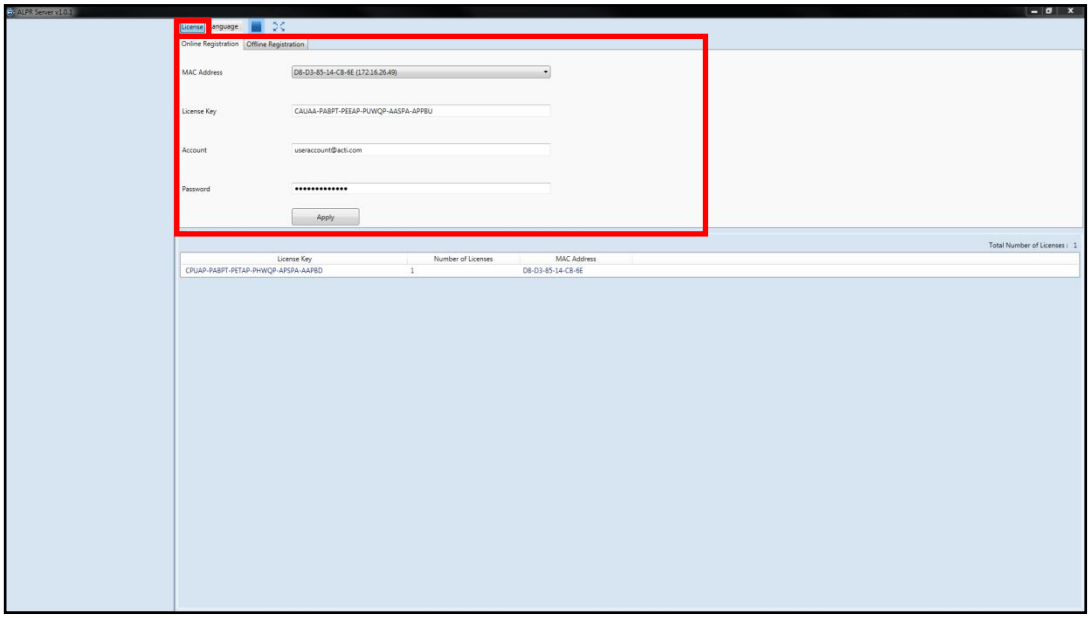
Based on the network conditions of your site, follow Online Activation SOP or Offline Activation SOP to activate your license.

Online Activation SOP

Step 1: Membership ID in **ACTi Member Center** is required for activation. Register one for free at http://member.acti.com/

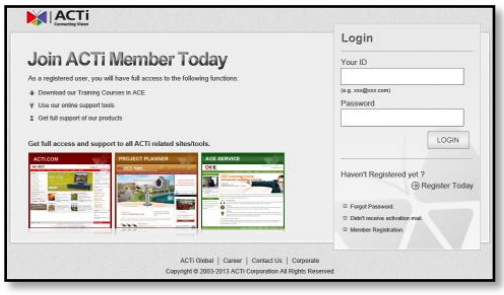


Step 2: Log in to ALPR Server, go to **License** tab→**Online Registration** tab. Select the **MAC Address**, enter your **License Key**, ACTi member **Account** and **Password**, and then click "**Apply**". ALPR server will connect to the license data server via Internet to register the license key, and unlock the channels.



Offline Activation SOP

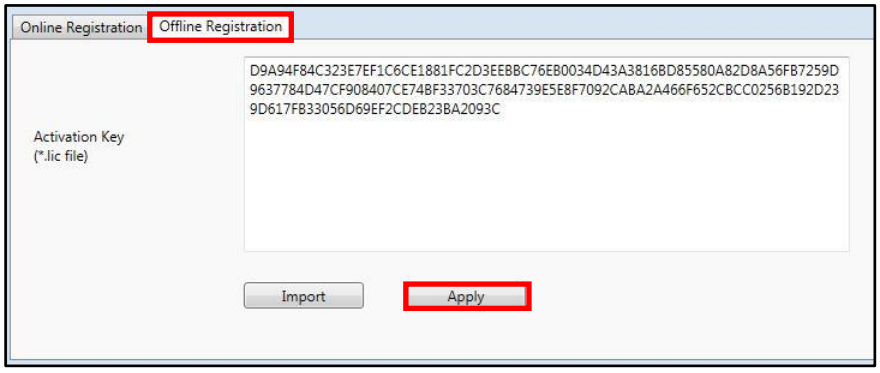
Step 1: Membership ID in **ACTi Member Center** is required for activation. Register one for free at http://member.acti.com/



Step 2: Access http://www.acti.com/support/LicenseMgt/index.asp and select "ALPR Server". Enter the **License Key** and the **MAC address** of the **ALPR Server 1** server computer, click "**Submit**".

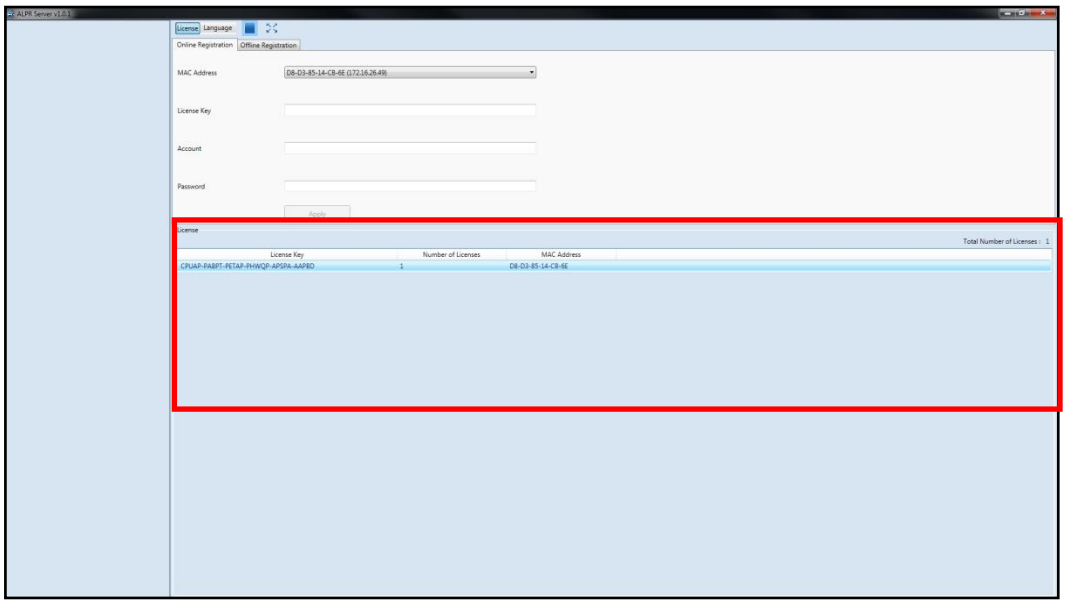
An E-mail with activation code file (AUL.lic) will be sent to your registered E-mail account.

Step 3: Log in IVS server from local or via web client. Go to **License** tab→ **Offline Registration** tab → click "**Import**" and upload the license file (AUL.lic). Click "**Apply**" to activate this license.



Verify Your License

Once your license is successfully activated, the license information will be shown on **License** page.



Important

The license data will be erased once ALPR Server 1 is uninstalled. Be sure to retain your license key information in a safe place because you may need to reinstall the software. After the software is uninstalled, you should contact **ACTi Customer Help Desk** http://www.acti.com/CHD to clear the original registration data in our data server, and then you may activate the license again.

Tip

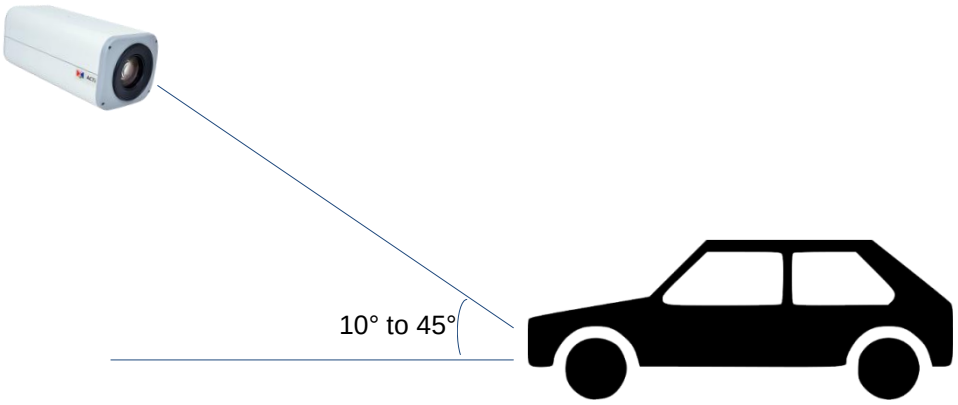
How to find MAC Address

1. Click **Windows Start**, in the run box on **Start** menu, input "**cmd**".
2. Execute the **cmd** program, and input the command "**ipconfig /all**" or "**getmac**"
3. The MAC address will be referred to as the **Physical Address**, made up of 12 characters e.g. **00-1E-65-FE-8E-98**

Camera Installation

The precision of the ALPR Server 1's recognition depends on many factors, including: the image quality in the video, the pixels counts shown, user applications, camera installation, etc… Below are a few guidelines to take into consideration when installing your camera device:

1) **Shooting Angle of the Camera:** the shooting angle of the camera to the license place should be between the ranges of 10° to 45°, as shown in the illustration below:

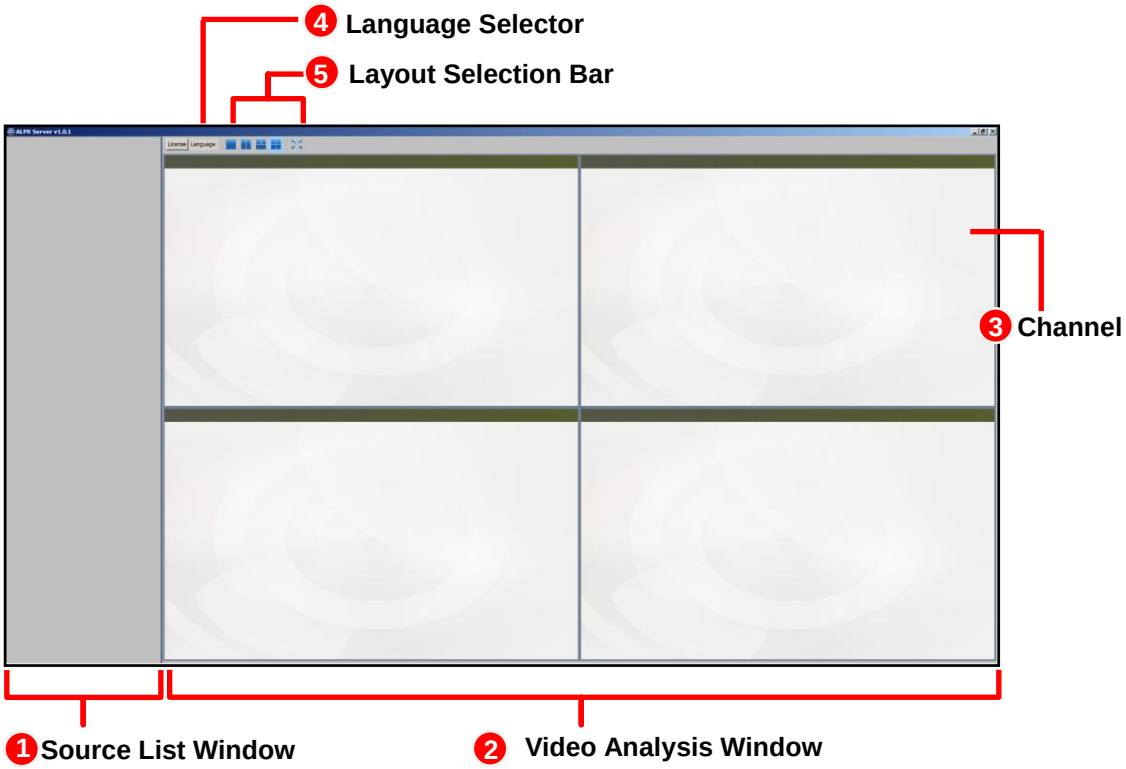


2) **Frame Rate in the Video Stream:** Your camera device's frame rate should be set to 25FPS or 30FPS or higher
3) **Shutter Speed:** The shutter speed on your camera device should be faster than or equal to 1/100 or 1/120 seconds
4) **Shape of the License Plate:** The shape of the license plate captured in your video should be as similar to a rectangle as possible
5) **Height of characters and distance between characters on license plate:** When captured by your camera device, the height of the characters should be taller than 40 pixels, and the distance between characters should be wider than 4 pixels.
6) **Image Quality:** Image quality is critical for the **ALPR Server 1's** recognition function to work properly. Please make sure the exposure, sharpness, and color presentation of the image captured by your camera device is adequate.

Setup Analysis Rules

In order to be able to apply ALPR technology to a video stream, two basic components are needed: **Video Sources** and **Analysis Rules**. This chapter will guide you through everything you need to know in order to have a **video source**, set up **analysis rules**, and apply them to your video.

When you open your **ACTi ALPR Server 1**, you will see the following display:



1. **Source List Window:** All of your video sources are shown here, and can be managed from here.
2. **Video Analysis Window:** This area can display your camera views. It can be composed of 1 or more **channels**.
3. **Channel:** Each channel displays a camera view.
4. **Language Selector:** Select the display language.
5. **Layout Selection Bar:** Choose from 4 layout styles, or expand to full screen.

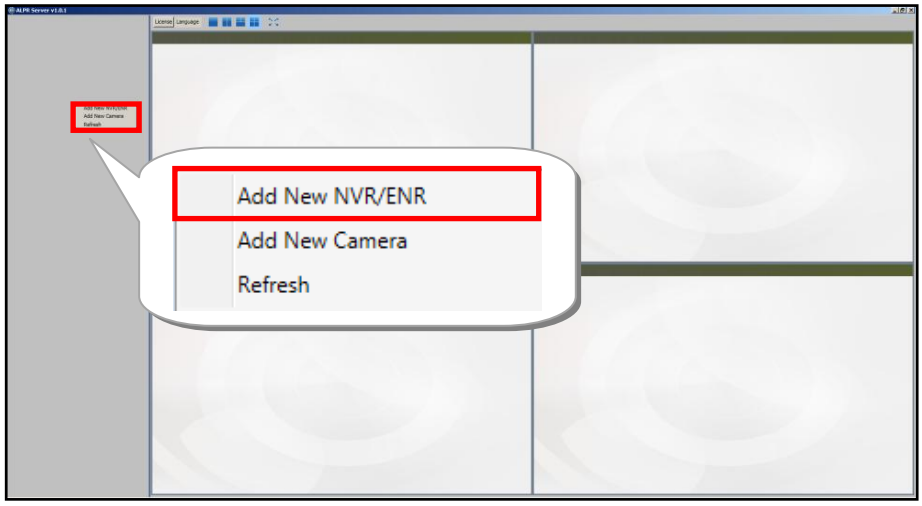
Add Video Source

Now that you have your **ACTi ALPR Server 1** open, you are ready to add some video sources so that they can be analyzed!

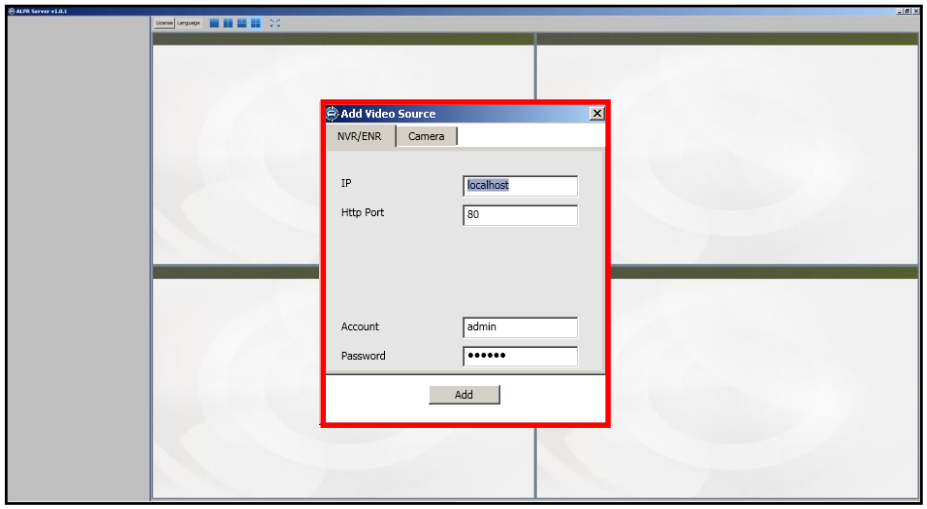
Before adding a video source, make sure you have a working NVR Server or camera and confirm its following properties: **(1) IP Address**, **(2) HTTP Port**, **(3) Account Name** and **(4) Password**.

To add an NVR server as a video source, follow these steps:

1. **Right-click** on the **Source List Window**, and select **"Add New NVR"**.



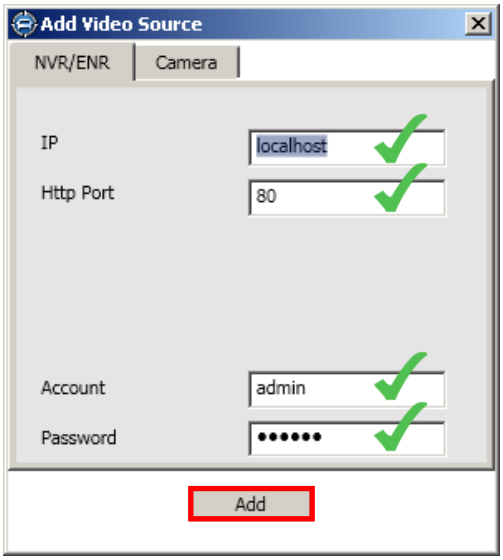
2. After selecting **"Add New NVR"**, a popup window will appear as shown below.



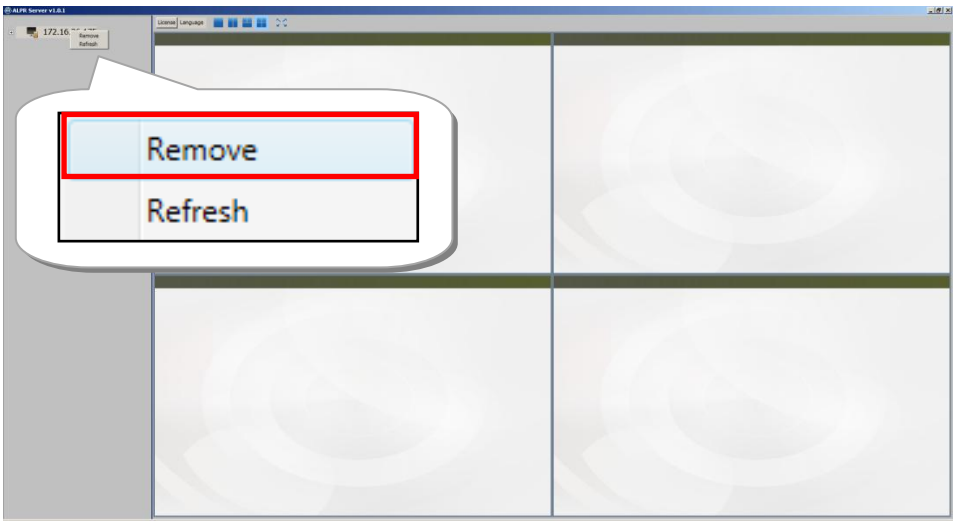
Fill in the 4 marked fields that are required to communicate with the NVR Server: **IP Address**, **HTTP Port**, **Account Name**, and **Password**.

If your NVR server is installed on the same device as your **ACTi ALPR Server 1**, you can keep the default **"localhost"** that has been filled in for the **IP Address** field, or use the IP address **127.0.0.1**.

3. Click **"Add"**.



- To **Remove** an NVR server from the **Video Source List**, **right-click** on the server's IP and select **"Remove"**.

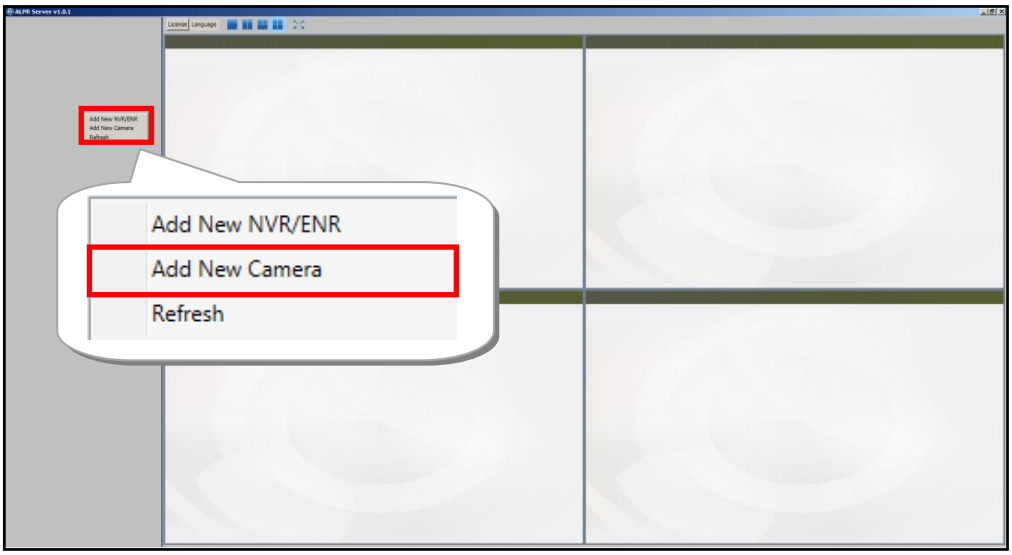


Note

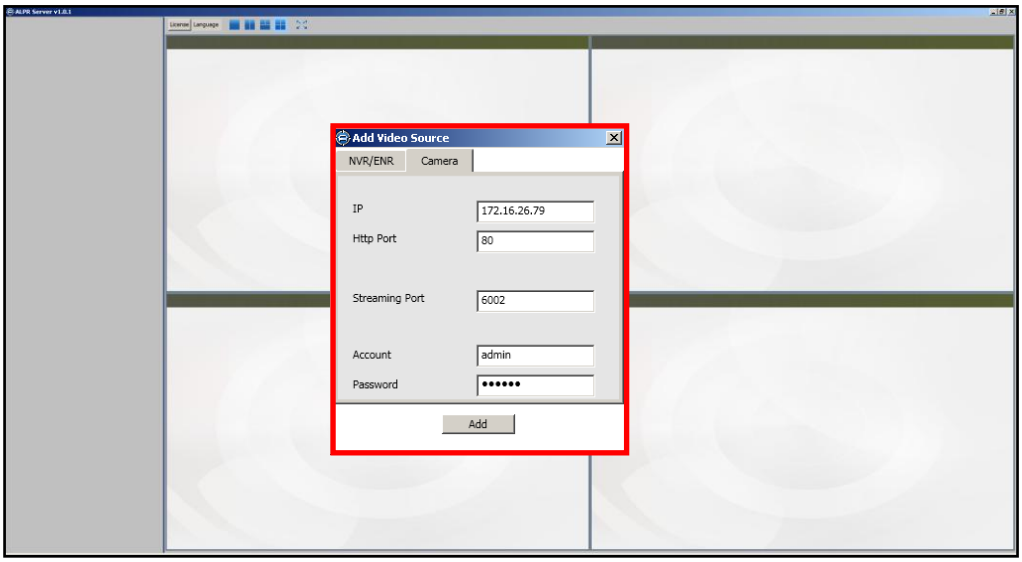
Once an **NVR Server** is added to the **Video Source List**, all devices that are on the **NVR Server** will be added to the **Video Source List**. Please make sure the camera view you want to analyze has already been added to the **NVR Server**.

To add camera as a video source, follow these steps:

1. **Right-click** on the **Source List Window**, and select **"Add New Camera"**.



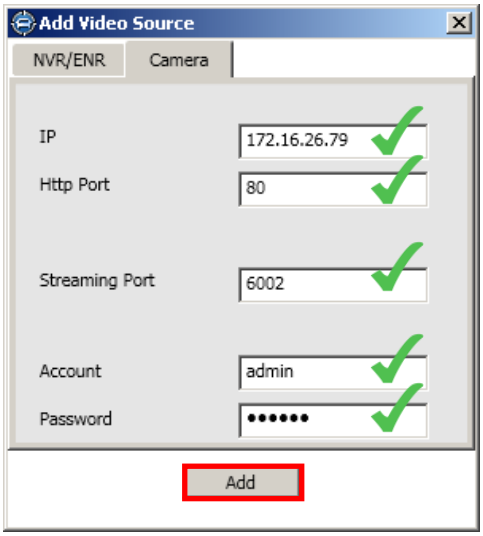
2. After selecting **"Add New Camera"**, a popup window will appear as shown below.



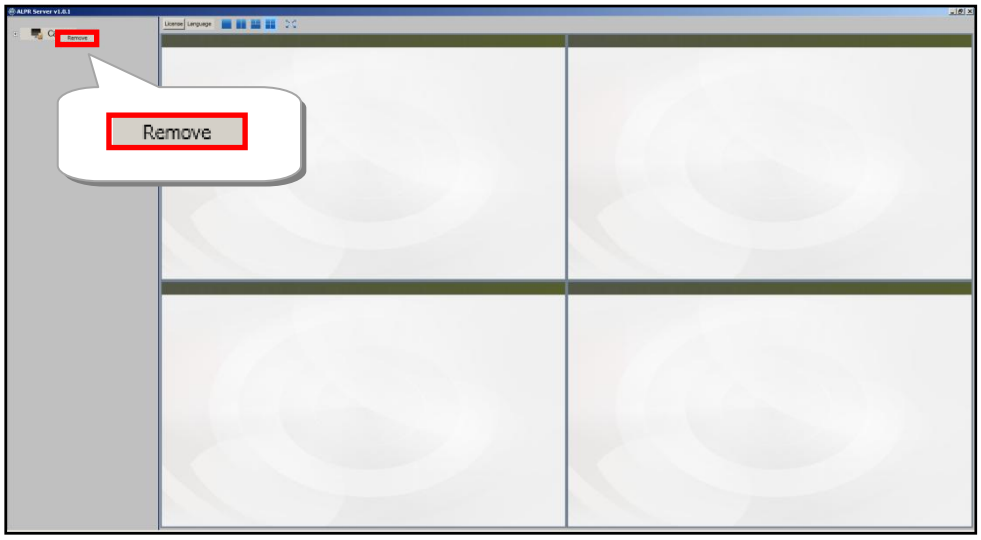
Fill in the 5 marked fields that are required to communicate with the camera: **IP Address**, **HTTP Port**, **Streaming Port, Account Name**, and **Password**.

You can keep the default **"6002"** that has been filled in for the **Streaming Port** field, or select any port that is not being used.

3. Click **"Add"**.



- To **Remove** an NVR server from the **Video Source List**, **right-click** on the device and click on **"Remove"**.

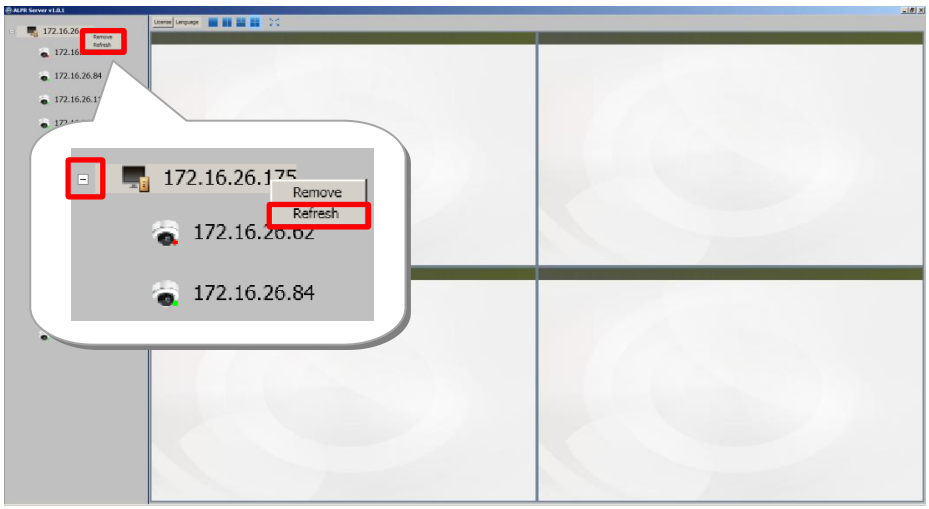


Add Channels

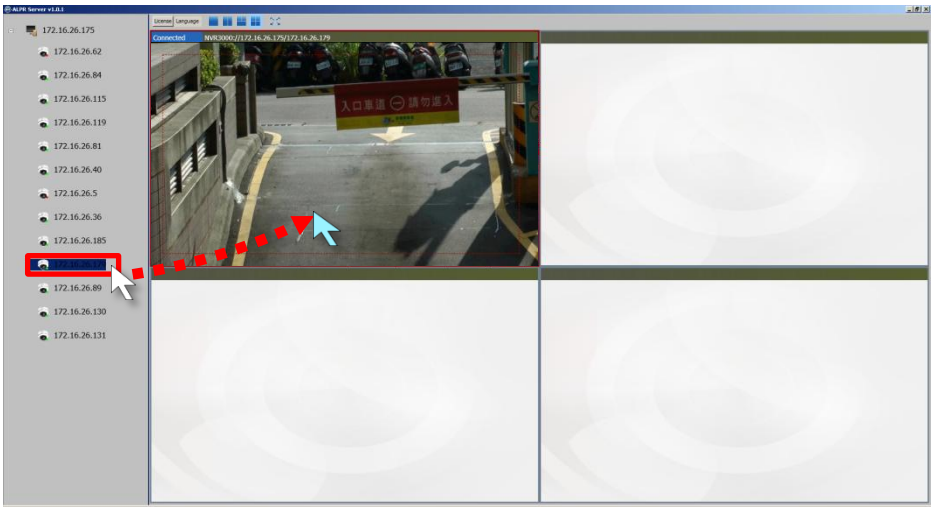
In order to see the camera views from the video sources you have added, you need to add them to one of the **channels** in the **Video Analysis Window**.

To add channels, follow these steps:

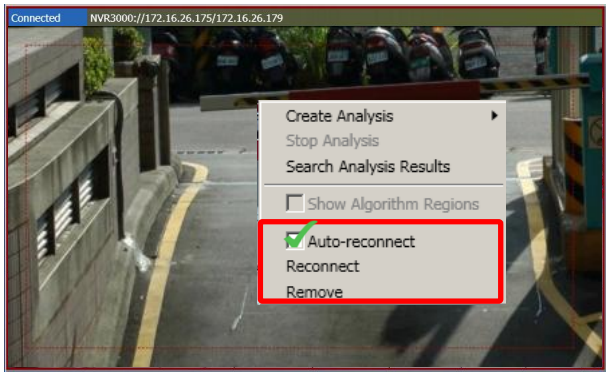
1. On the **Source List Window**, find the device for which you would like to see the camera view.
   - If you have devices added in your NVR server but cannot see them in your **ACTi ALPR Server 1 Source List Window**, click on the collapse icon shown next to your NVR server in the **Source List Window** to expand the device list, or **right-click** on your NVR server IP address and select **"Refresh"**.



2. After finding your device, you can see the camera views from the device by dragging it to one of the **channels** in the **Video Analysis Window**. If a new device is dragged to a **channel** with an existing camera view, the existing camera view will be replaced.



- To **Remove** a camera view, **right-click** on the channel and select **"Remove"**. Note that the analysis will stop running if you perform this action.
- To renew the connection to a device in, **right-click** on the channel and select **"Reconnect"**. Note that if you have an analysis running, you must stop the analysis to perform this action.
- If you want the program to automatically reconnect when it detects that it has been disconnected from the device, keep the box for **"auto reconnect"** marked.



Create an Analysis Rule

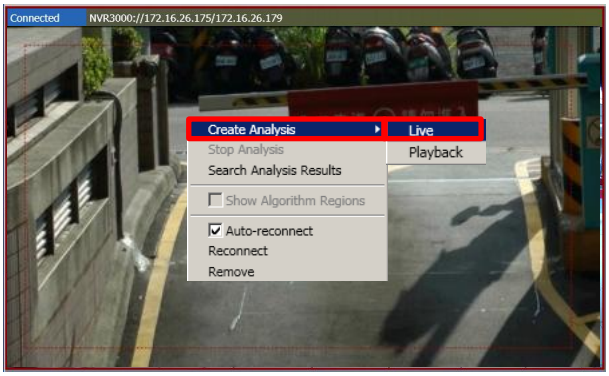
Now that you able to see your camera's video feeds, you are ready to create your analysis rules for your camera views! Note that analyses can only be performed when the device has been dragged into a channel window. One channel can only run 1 analysis at a time, and the maximum number of channels that can perform analyses simultaneously is 4. Please note smoothness of performance may depend on your computer's hardware capacity.

Accessing New Analysis Window

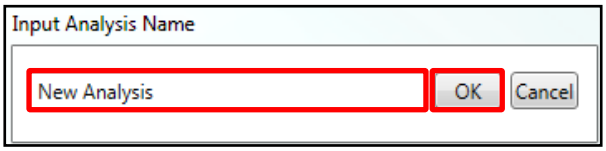
Live View Analysis

To access the function to create a new analysis rule for a live view, follow the steps below:

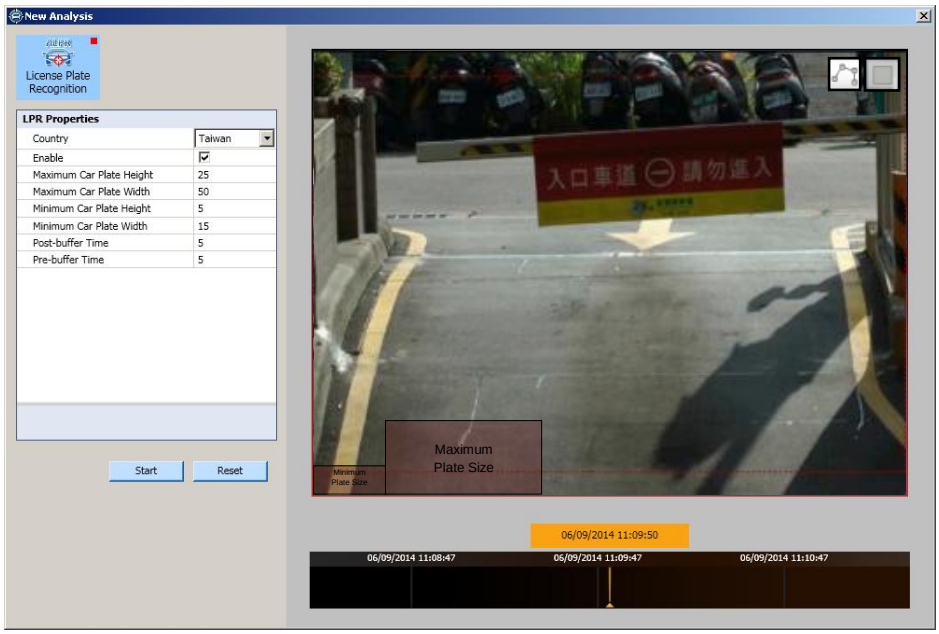
1. **Right-click** on the channel window of your video, click on **"Create Analysis"**, and select "**Live**".



2. In the new pop-up window that appears, input a name for your **Analysis Rule** and click **"OK"**.



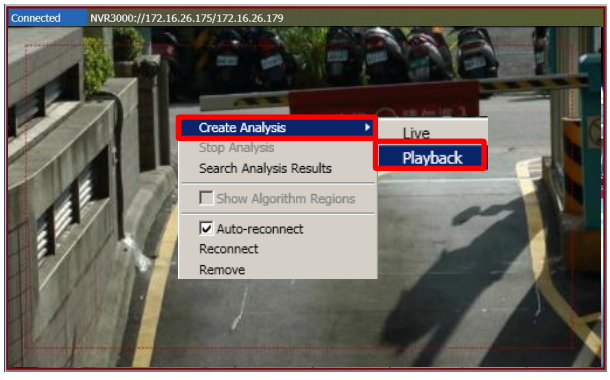
3. A **New Analysis Window** will appear, and you are now ready to set up your **Analysis Rules.**



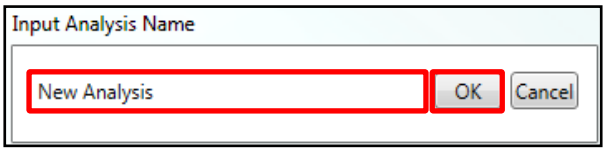
Playback Analysis

To access the function to create a new analysis rule for non-live video footage that already exists for the selected channel, follow the steps below:

1. **Right-click** on the channel window of your video, click on **"Create Analysis"**, and select "**Playback**".



2. In the new pop-up window that appears, input a name for your **Analysis Rule** and click **"OK"**.



3. A **New Analysis Window** will appear, in which you can select the time interval you wish to analyze. To set your time interval, follow the steps below:
    1. Set the beginning of the interval by **right-clicking** on any location on the **Time Bar**, and selecting **"Set as Begin"**.

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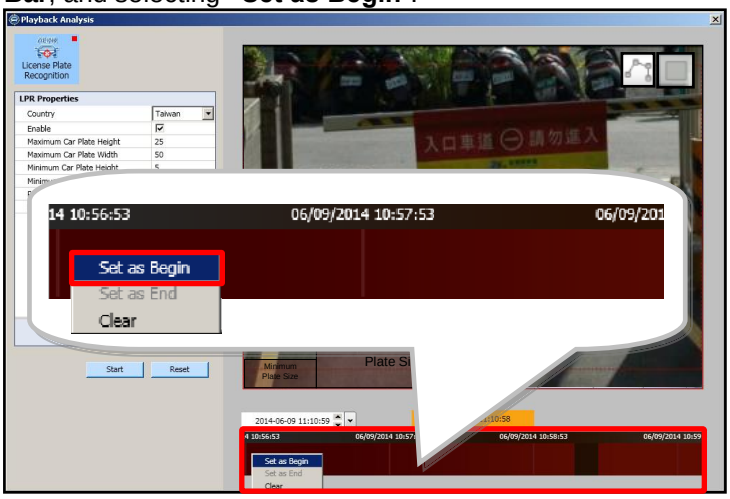
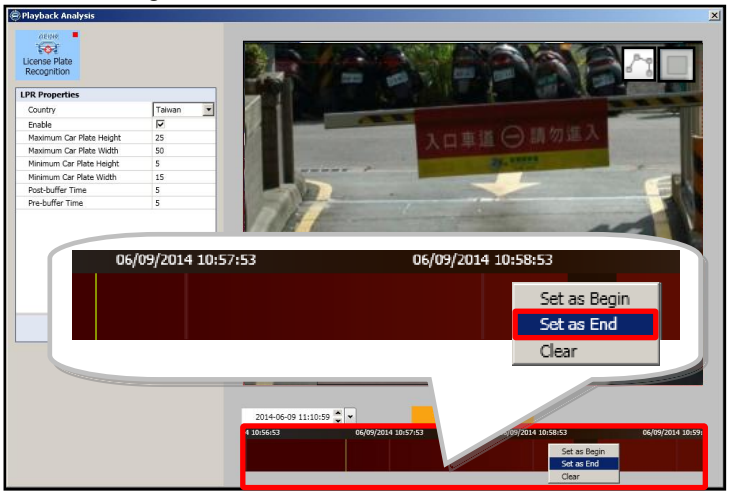
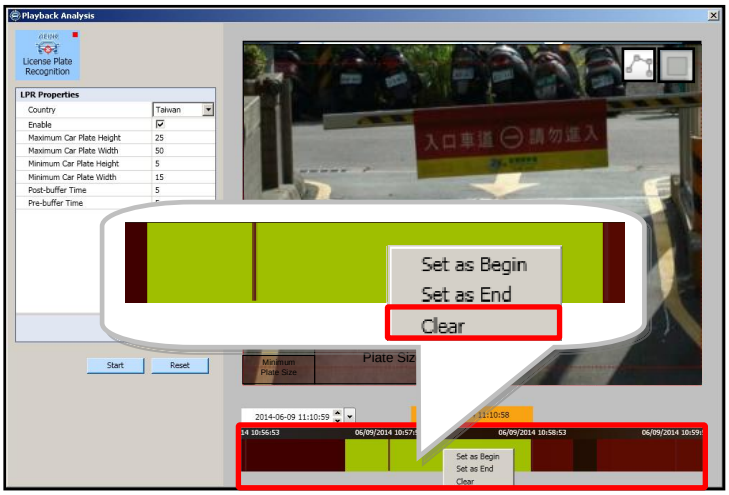


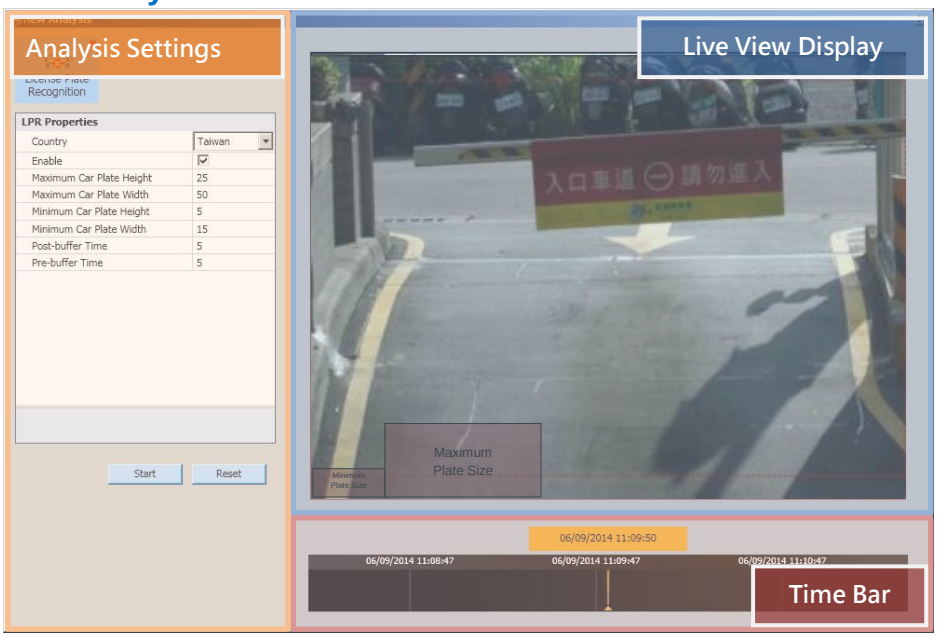
    2. Set the end of the interval by **right-clicking** on any location on the time bar, and selecting "**Set as End**".



    3. The selected area should appear highlighted in green. To clear or edit your selection, **right-click** and select "**Clear**" to set a new time interval.



New Analysis Window UI Introduction



- **Analysis Settings**: Provides for the adjustment of the algorithm's unique properties.
- **Live View Display**: Provides live camera view of the selected video source.
- **Time Bar**: Shows the time at which the video in **Live View Display** is taking place (as determined by user's PC).

License Plate Recognition Algorithm Setup

In order for the License Place Recognition algorithm to perform optimally, you can adjust **LPR Properties** to obtain the best results.

Before adjusting any settings, make sure the camera that the camera is placed correctly, and that it meets the following criteria:

1. The angle between the camera and the license plate to be recognized lies between 10° and 45°, so that the shape of the license plate is as close to a rectangle as possible
2. The license plate characters to be recognized in the camera view are at least 40 pixels in height
3. The camera's frame rate is at least 25 FPS
4. The camera's shutter speed is at least 1/100 s.

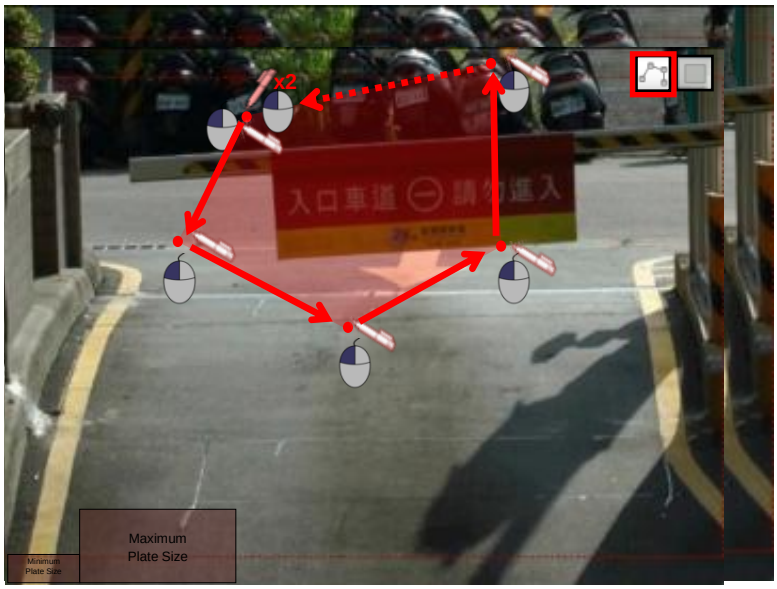
To start setting up your License Plate Recognition algorithm, follow the steps below:

1. Adjust the **LPR Property Settings** to get the most optimal results:

Property	Description	Default
Country	Used as reference only. Allows you to choose from a predetermined list of countries, to increase the accuracy of recognition results.	Taiwan
Enable	Enables **LPR** algorithm.	Enabled
Maximum Car Plate Height	Set the **maximum height** (1-120 pixels) of any license plate to be recognized. Any license plate whose height is larger than this value will be ignored. The **Maximum Plate Size Reference Frame** (found in the bottom left corner of the **Live View Display**) provides visual reference for the value selected. The ratio between **Maximum Car Plate Height** and **Minimum Car Plate Height** should be as close to 2 as possible.	25
Maximum Car Plate Width	Set the **maximum width** (1-160 pixels) of any license plate to be recognized. Any license plate whose width is larger than this value will be ignored. The **Maximum Plate Size Reference Frame** (found in the bottom left corner of the **Live View Display**) provides visual reference for the value selected. The ratio between **Maximum Car Plate Width** and **Minimum Car Plate Width** should be as close to 2 as possible.	50
Minimum Car Plate Height	Set the **minimum height** (1-120 pixels) of any license plate to be recognized. Any license plate whose height is smaller than this value will be ignored. The **Minimum Plate Size Reference Frame** (found in the bottom left corner of the **Live View Display**) provides visual reference for the value selected. The ratio between **Maximum Car Plate Height** and **Minimum Car Plate Height** should be as close to 2 as possible.	16
Minimum Car Plate Width	Set the **minimum width** (1-160 pixels) of any license plate to be recognized. Any license plate whose width is smaller than this value will be ignored. The **Minimum Plate Size Reference Frame** (found in the bottom left corner of the **Live View Display**) provides visual reference for the value selected. The ratio between **Maximum Car Plate Width** and **Minimum Car Plate Width** should be as close to 2 as possible.	15
Post-buffer Time	Set the amount of time (in seconds) that video footage will be recorded **after** a license plate is recognized.	5
Pre-buffer Time	Set the amount of time (in seconds) that video footage will be recorded **before** a license plate is recognized.	5

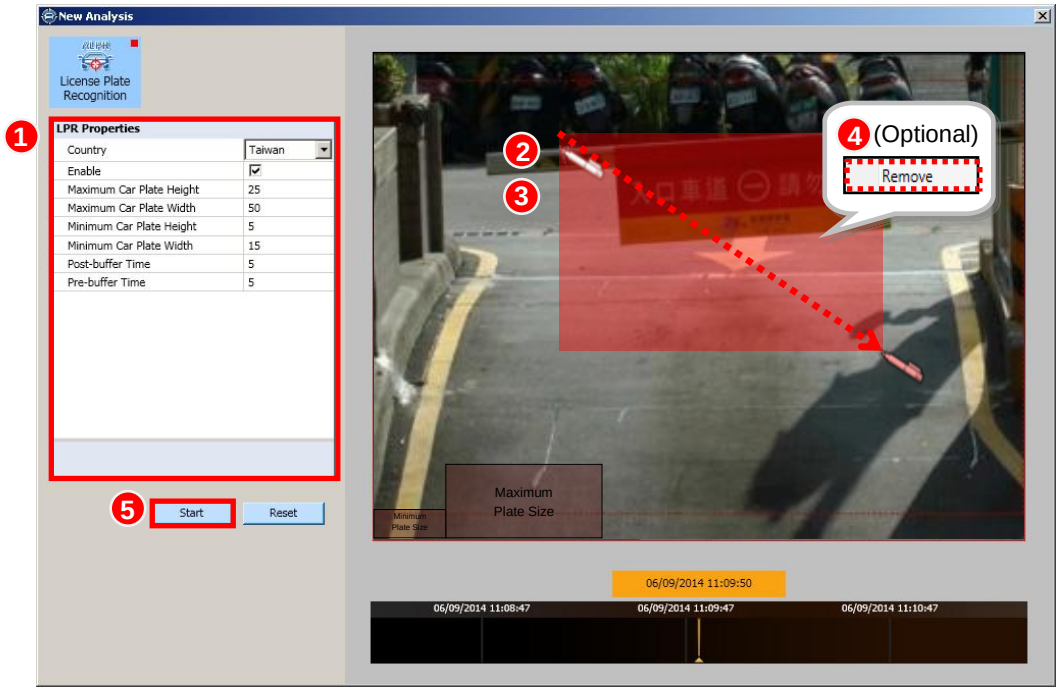
2. To narrow down the area in which the algorithm will be actively running, move your cursor over to the area showing video stream, at which point it will appear as a drawing pen. To draw the rectangle that will mark the area for detection, click and drag your cursor to draw a red rectangle.

3. If the area you want to mark does not fit to the form of a rectangle, you may also choose to draw a polygon by selecting the  icon on the upper right corner of your **Live View Display** area. To draw the lines for the sides of your polygon, click your cursor to mark the endpoints of each line. **Double-click** on the final endpoint of the final line to confirm and highlight the polygon in light blue, as shown in the illustration below. Make sure your lines connect (a minimum of 3 lines) to form a closed shape.



4. To adjust the marked area, you can drag the highlighted area to keep its original shape or **right-click** on the area, select **"remove"**, and re-draw. For polygons, you may toggle the endpoints of the lines that make up the sides of your polygon.

5. Click **"Start Smart Search"** to start running your analysis.



Tip

For a better experience, make sure that the height of your detection area is no taller than 10 times the Maximum Plate Size height, and that the width of your detection area is no wider than 10 times the Maximum Plate Size width.

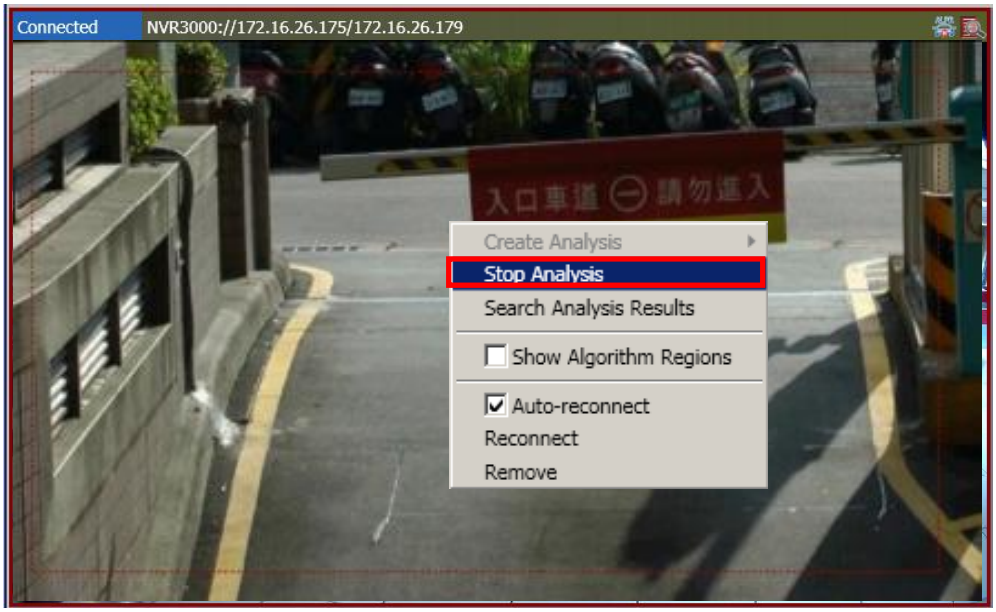
Important Notice

The precision of your video analysis depends on the video quality and may be affected by the characteristics of objects in the video stream. To obtain the best results, test your analysis rules and optimize your settings. For further inquiries, provide a RAW file of your analysis and contact our Customer Help Desk.

Stop (Cancel) an Analysis Rule

If you are only running your **Analysis Rule** for a specific time period or you wish to stop running the **Analysis Rule** at any point, you can do so by using the **"Stop Analysis"** function.

To access this function, simply **right-click** on the channel that you wish to stop the analysis, and select **"Stop Analysis"**.



Important Notice

All analyses will stop running if the **ACTi ALPR Server 1** window is closed. To continue running an analysis, the settings will have to be re-configured in a new **Analysis Rule**.

Monitoring

Once you have added your video sources and have your analysis rules set up, you are now ready to monitor your video feeds and watch them in action! Each channel that is running an analysis will have icons on the upper right corner so that you can know at a quick glance what algorithms are running.

Analysis is running

License Plate Recognition

Progress Bar
(For Playback Analyses)

Display Detection Indicators

To enhance awareness when monitoring your live video feed, it may be helpful to have visual cues about the analyses that you are running. In order to achieve this, **ACTi ALPR Server 1** provides the option to display detection indicators or show the moving objects on the screen.

To access this function, simply right-click on a channel and select "**Show Algorithm Regions**" to display detection indicators.

Display Latest Recognition Results

While monitoring, it may be helpful to see information about the license plates that are being recognized. In order to achieve this, **ACTi ALPR Server 1** provides the option to display real-time information of the latest recognized license plate.

To access this function, simply double-click the channel for which you would like to see the results. An information panel will appear on the right side of your screen, showing a snapshot of the license plate, the result of the recognition, time and date captured, and the confidence level of the algorithm.

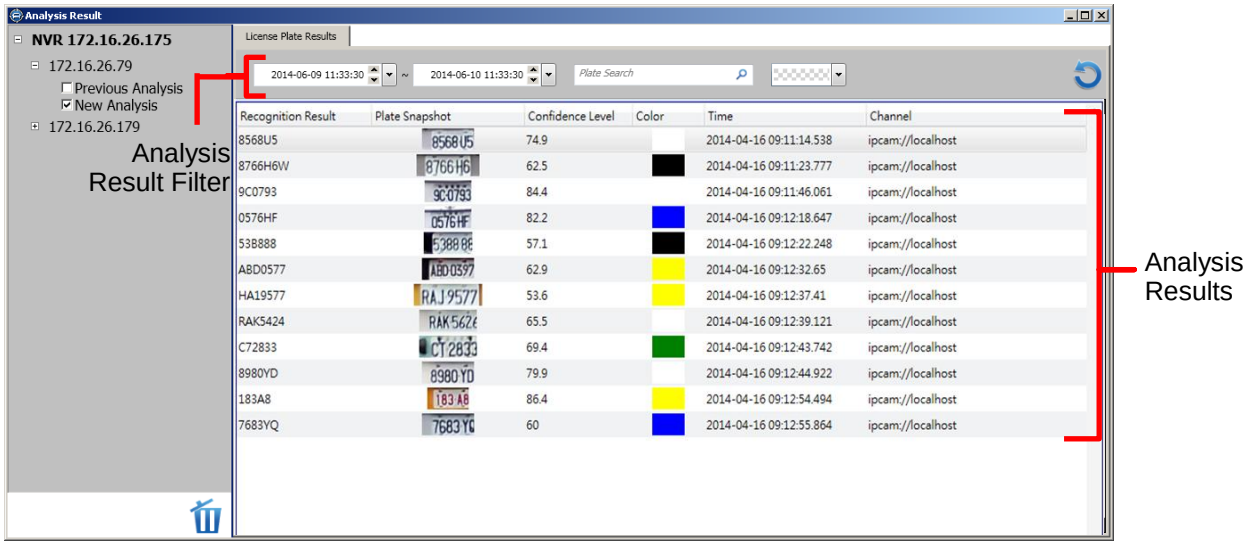
To leave this function, simply double-click on the area showing the camera view.

Analysis Results

After running your ALPR algorithm, the next logical step would be to look at what license plates have been recognized. To browse the results, you can use the **Search Analysis Results** function of **ACTi ALPR Server 1**.

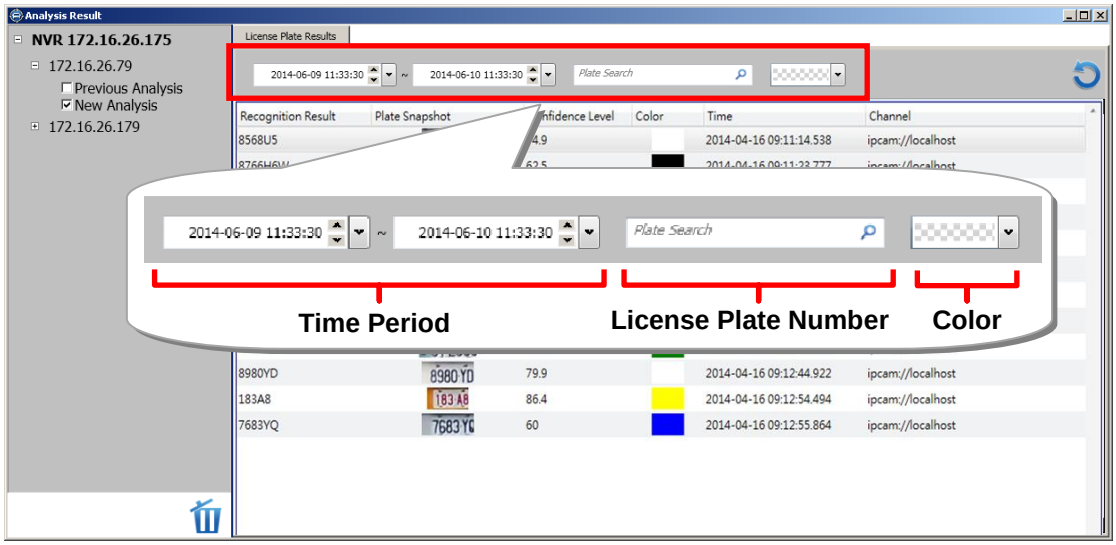
To access this function, **right-click** on the area of the **Video Analysis Window** that is running the analysis rule for which you would like to see the results for and select **"Search Analysis Results"**.

A new **Analysis Results Window** that contains the license plates recognized as a result of your algorithm will open. For each license plate recognized the recognition result, a snapshot of the license plate, the confidence level of the algorithm, the color of the car, the time it was recognized, as well as the channel from which it was recognized will be shown.



Search Results by Filters

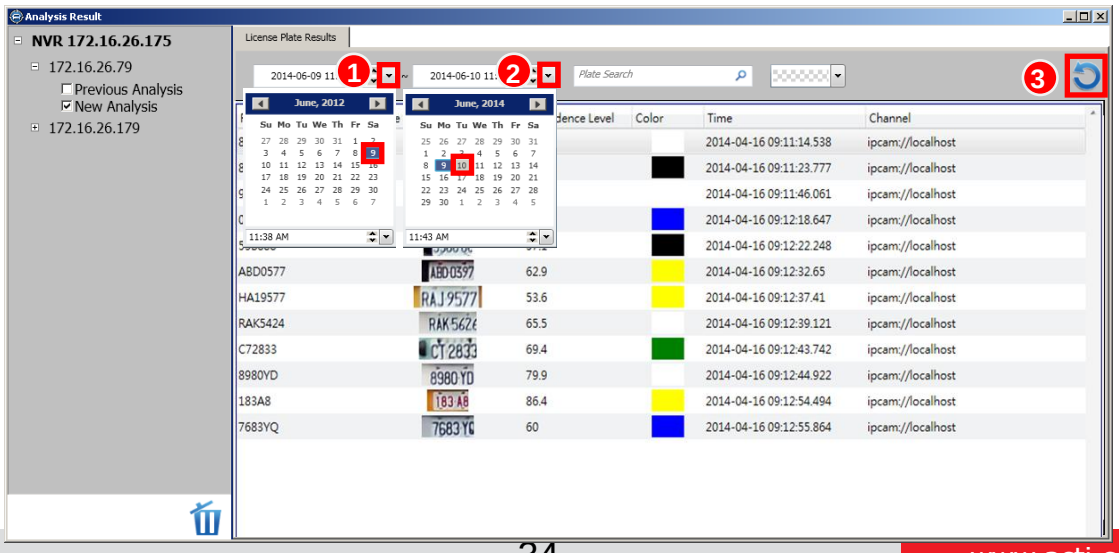
To narrow down the search results that are shown, you can use the options presented in the **Analysis Result Filter** area to filter by **Time Period**, **Plate Number**, and **Car Color**. Note that these filters are used in conjunction with each other.



ALPR Results by Time Period

If the results you wish to see are from a specific time period, you can set this time period by adjusting the **Time Period** setting in the **Analysis Result Filter** area.

1. Select the date and time for the beginning of the time period.
2. Select the date and time for the end of the time period.
3. Click .

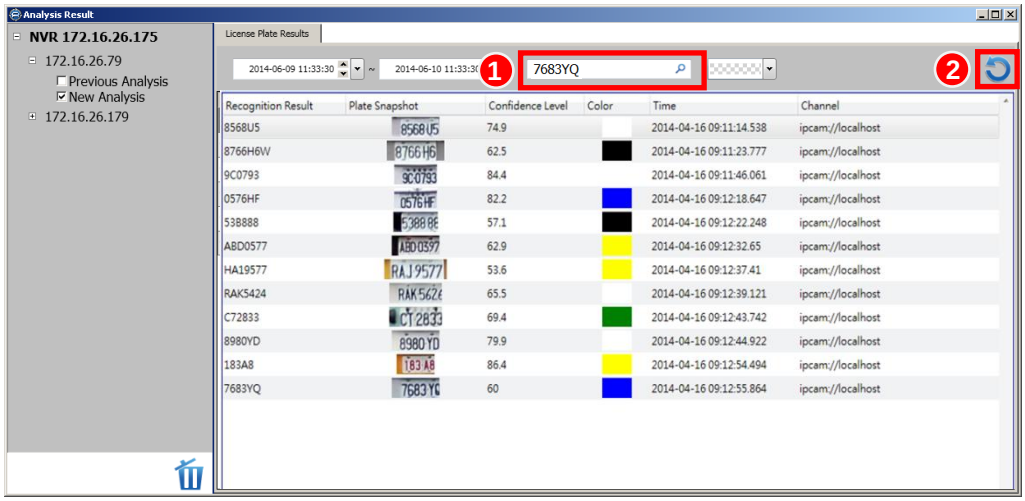


ALPR Results by License Plate Number

If you want to search for a specific License Plate Number, you can do so by typing in the **License Plate Search** in the **Analysis Result Filter** area.

For example, to only show the results for license plate number "7683YQ" follow the steps below:

1. Type in "7685YQ", or "685Y", or "76*Q" in the search box. The * symbols represents one or more unknown characters that may exist between known characters.
2. Click .

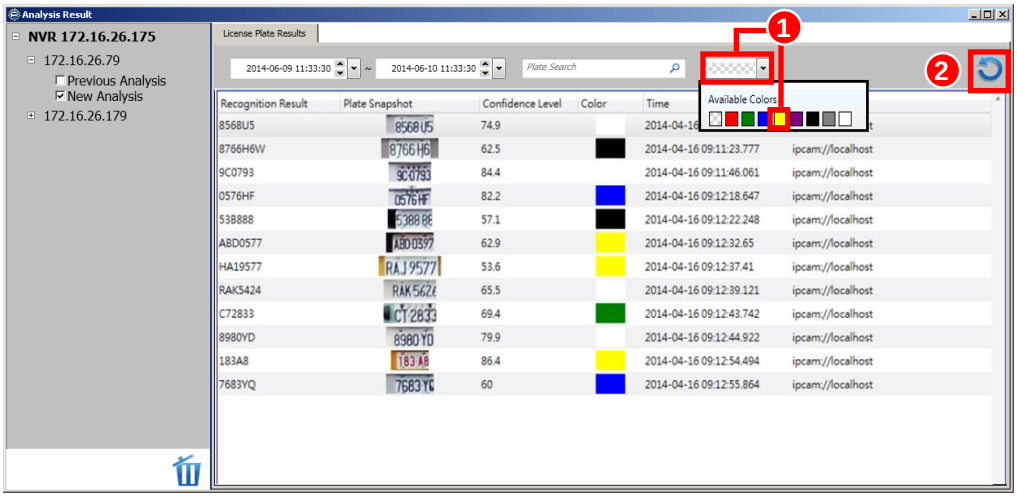


ALPR Results by Car Color

If you want to see results of license plates for cars of a specific color, you can set this by configuring the **Car Color** filter in the **Analysis Result Filter Area.**

For example, to only show cars that are yellow, you would have to:

1. Select the color that you wish to filter with from the drop-down menu.
2. Click .

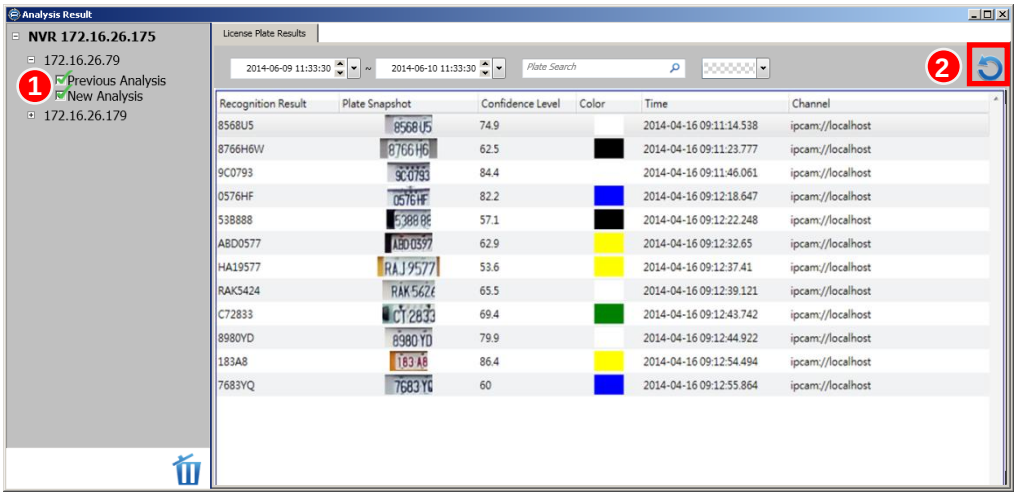


View Multiple ALPR Analysis Results

Once in the **Analysis Results Window**, you can select to view results for other ALPR analyses that you may have previously created for the same device.

In order to view the results of multiple analyses in the same device, follow these steps:

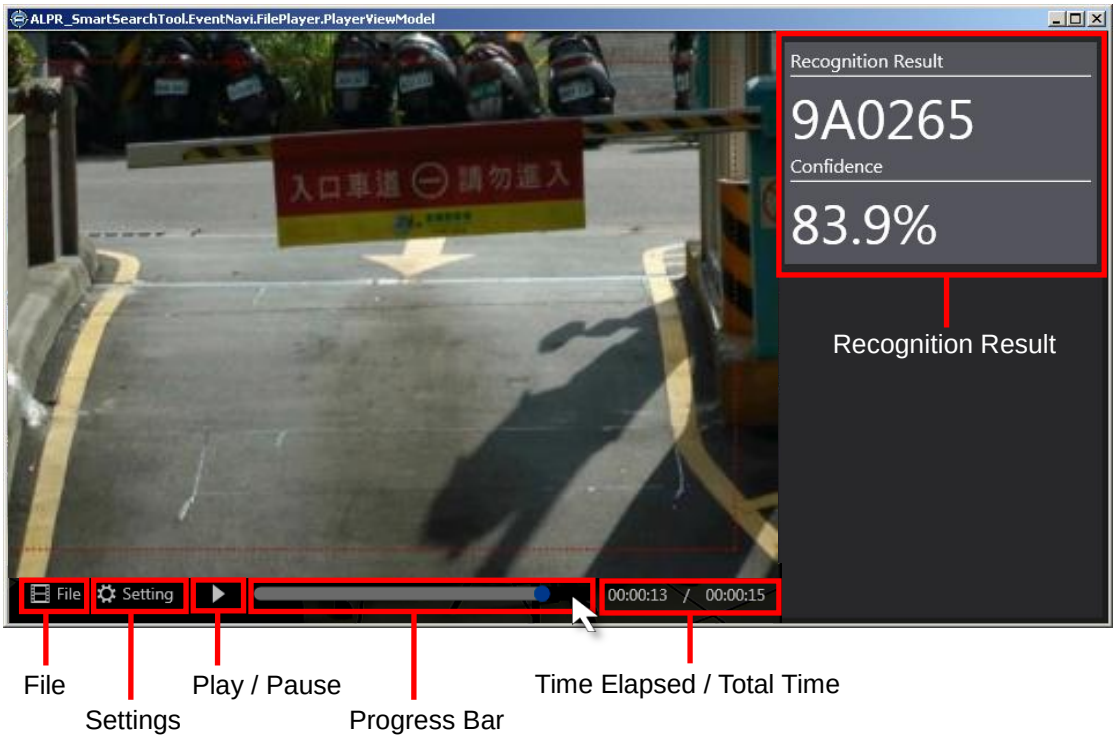
1. On the left hand side of your **Analysis Results Window**, under your selected device, check the boxes for the analysis rules that you wish to see the results for.
2. Click  .



Watch Analysis Playback

Now that your ALPR analyses have recognized license plates, you can watch the playback of when these license plates appeared.

To watch these videos, **double-click** on a single **Analysis Result** that you would like to review. A new **Player Window** will open, ready to play your event. Please note that for each recognized license plate, **ACTi ALPR Server 1** will also provide video footage of moments leading up to and after the recognition, as determined by "Pre-buffer Time" and "Post-buffer Time" properties in the **New Analysis Window**.



If you cannot see the control buttons located at the bottom of the **Player Window**, hover your cursor over the area it should be located, and it will appear.

Player Window Control Buttons

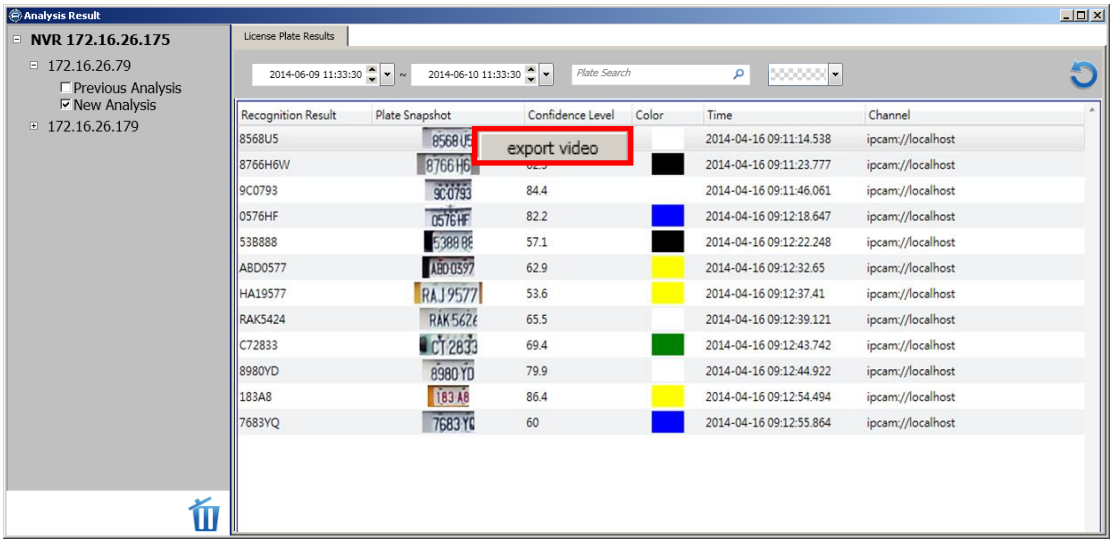
Button	Options		Description
File	Open		Allows you to open other files (in RAW format).
	Close		Closes the current file that is open.
Setting	Timestamp		After **Setting** button is clicked, the **Timestamp** checkbox will allow you to decide whether or not to show the time and date of the video. If selected, it will appear on the upper left corner of the **Player Window**.
	XML Analysis	SmartSearch Properties	After **Setting** button is clicked and **XML Analysis** checkbox is marked, you have the option to configure the **Smartsearch Properties**. If selected, you can decide where or not to display the detection indicators for the algorithms that were used.
		Object Filter	After **Setting** button is clicked and **XML Analysis** checkbox is marked, you have the option to configure the **Object Filter** properties. If selected, you can decide whether or not to display detection indicators for the events that were captured.
Play / Pause			Allows you to control the playback of the file.
Progress Bar			Shows the progress of the video playback. You can toggle the blue circle on the progress bar to jump to different parts of the video.

Note

The options that will be shown when selecting **SmartSearch Properties** and **Object Filter** are dynamic. This means that only algorithms that were used when creating the **Analysis Rule** of the video will be available.

Export Search Result

To export the video results of your analysis, **right-click** on the **Analysis Result** of the recognized license plate in your **Analysis Results Window**, and click **"Export Video**".

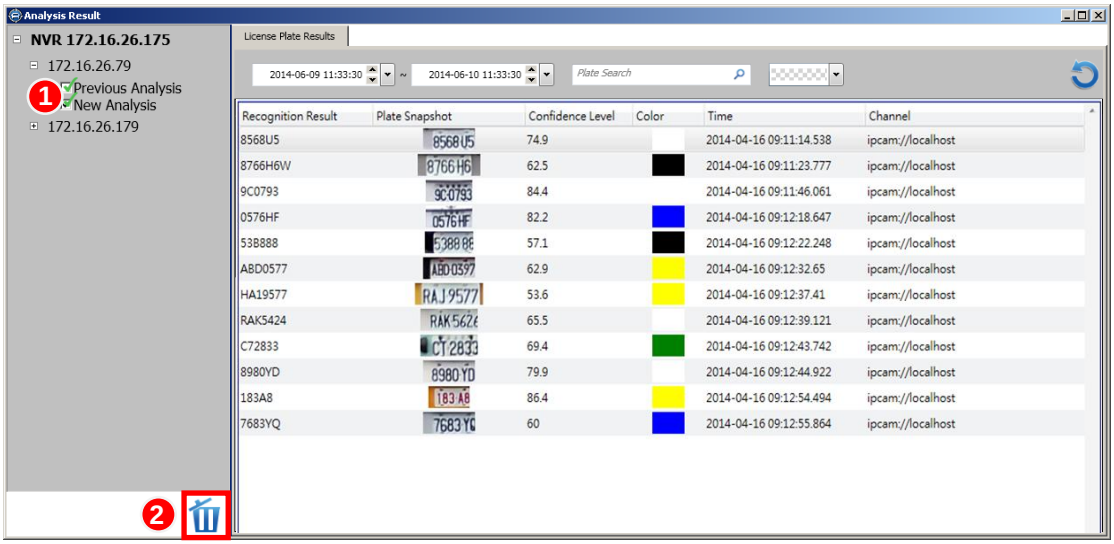


Delete an Analysis Rule

There may be a time when you wish to delete some of the **Analysis Rules** that you have created whether to increase storage space or for aesthetic purposes.

In order to permanently delete analyses, follow these steps:

1. On the left hand side of your **Analysis Results Window**, under your selected device, check the boxes for the analysis rules that you wish to delete.
2. Click .



Important Notice

Once an analysis rule is deleted, everything related to it (including events and videos captured using the analysis rule) will also be deleted.