

2014

Crystal System customization for work with Autocode NUUO

Configuration Guide



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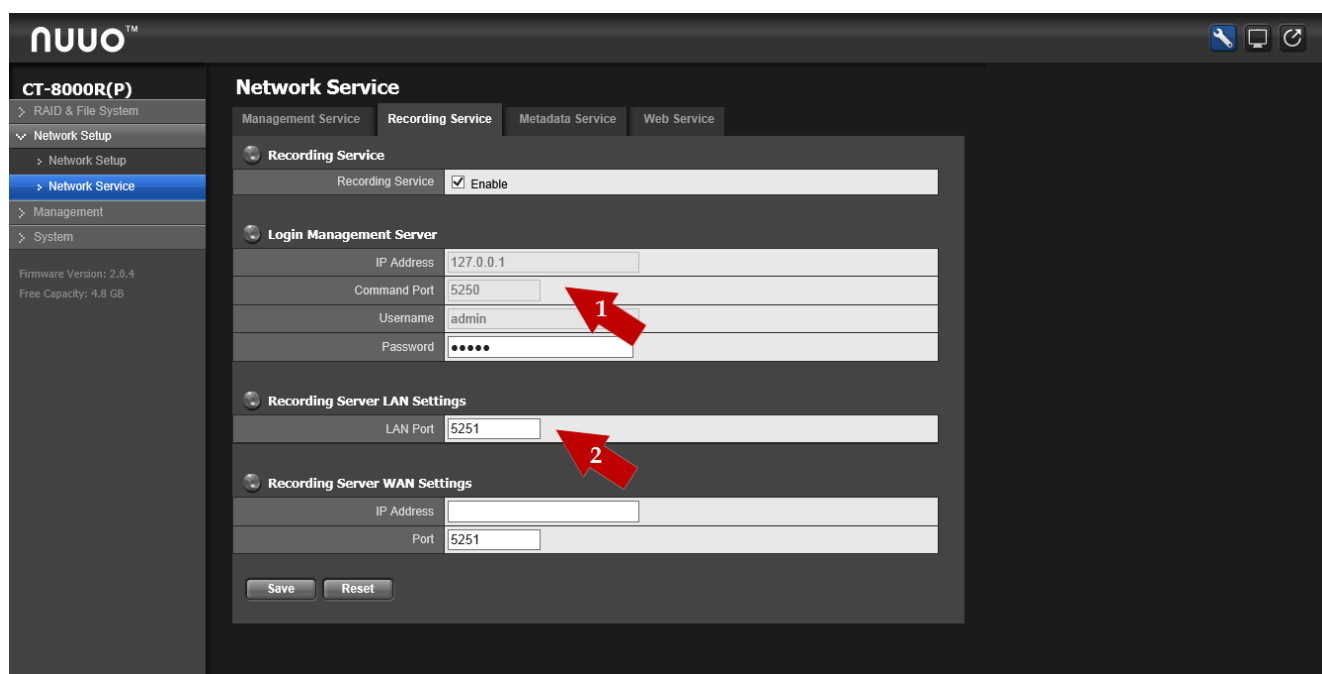
Prior Configuration of Crystal System

After installation of AutoCode NUUO it should be connected to Crystal System to:

- receive video and archive from Crystal System;
- send data on recognized plates to Crystal System.

Unlike **Main Console System**, **Crystal System** does not require customization of **Live Streaming** servers and **Remote Playback** - they are turned on by default. To see data ports - they are necessary for AutoCode NUUO configuration - open **Web Server** application:

1. **Login Management Server** - port for transferring video for recognition;
2. **Recording Server LAN Settings** - port for transferring video archive.



The screenshot displays the NUUO web interface for the CT-8000R(P) device. The left sidebar shows a navigation menu with 'Network Setup' expanded and 'Network Service' selected. The main panel is titled 'Network Service' and contains several tabs: 'Management Service', 'Recording Service', 'Metadata Service', and 'Web Service'. The 'Recording Service' tab is active, showing a 'Recording Service' section with an 'Enable' checkbox checked. Below this is the 'Login Management Server' section with fields for IP Address (127.0.0.1), Command Port (5250), Username (admin), and Password (masked with dots). A red arrow labeled '1' points to the Username field. The 'Recording Server LAN Settings' section has a 'LAN Port' field set to 5251, with a red arrow labeled '2' pointing to it. The 'Recording Server WAN Settings' section has fields for IP Address and Port (5251). At the bottom are 'Save' and 'Reset' buttons.

Creation of new metadata source

Thus, all that should be configured in Crystal System is metadata obtaining. This guide contains information on incremental description of Crystal System configuration for receiving data about license plates recognized by AutoCode NUUO System with the help of metadata service.



Configuration of metadata obtaining

To configure obtaining data about recognized license plates (metadata) the following actions should be performed successively:

- create new metadata source;
- create new metadata channel;
- customize filtration of received and displayed data;
- specify data displaying parameters.

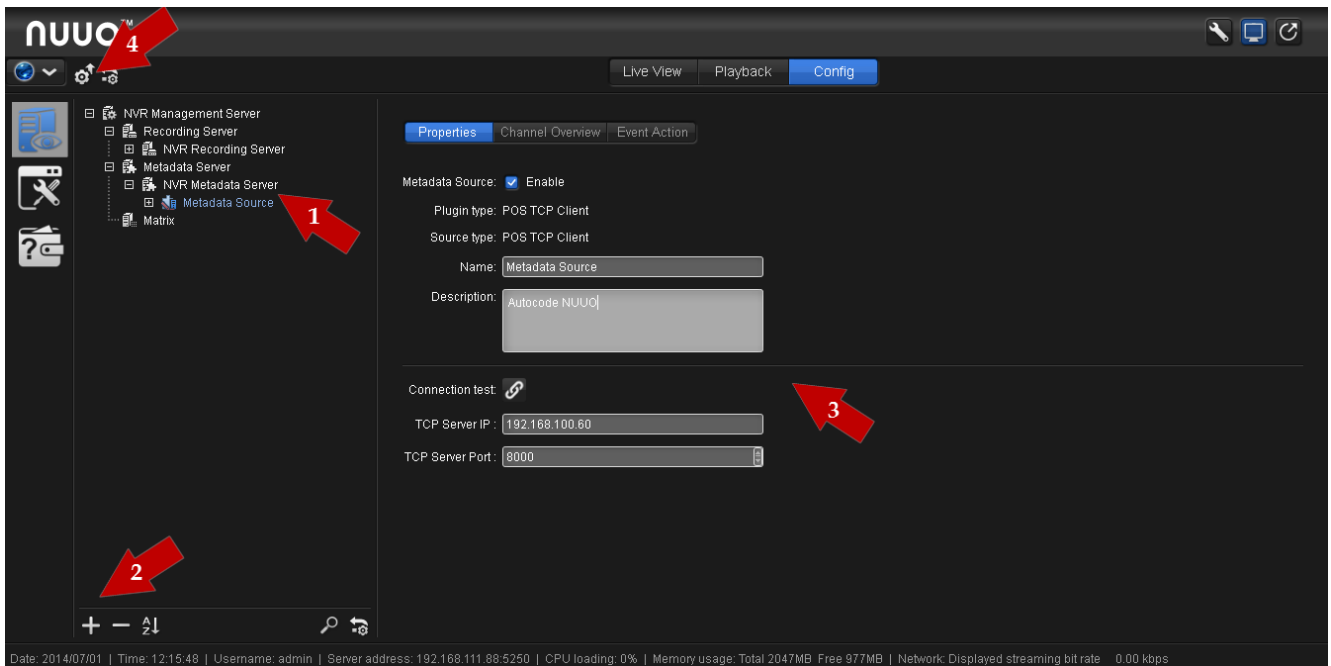
Creation of new metadata source

To create new metadata source the following actions should be performed successively (See pic. *Creation of new metadata source*):

3. select **NVR Metadata Server** of object tree in the left part of **Settings** tab in **NUUO Crystal NuClient** application;
4. click «+» in the bottom of tab;
5. specify connection to AutoCode NUUO parameters in the right part of window:
 - a. **Name** - name of new source, e.g. **Metadata Source**;
 - b. **Description** - short description of source, e.g. Autocode;
 - c. **TCP Server IP** - AutoCode NUUO address, where recognition should be performed, should be specified;
 - d. **TCP Server Port** - port specified as Server port in AutoCode NUUO settings;
6. click **Commit Config** at the top part of window to save configurations.

To check specified configurations correctness click **Connection test** button. However, note that connection tests pass successfully only if metadata transferring has been already configured in AutoCode NUUO.





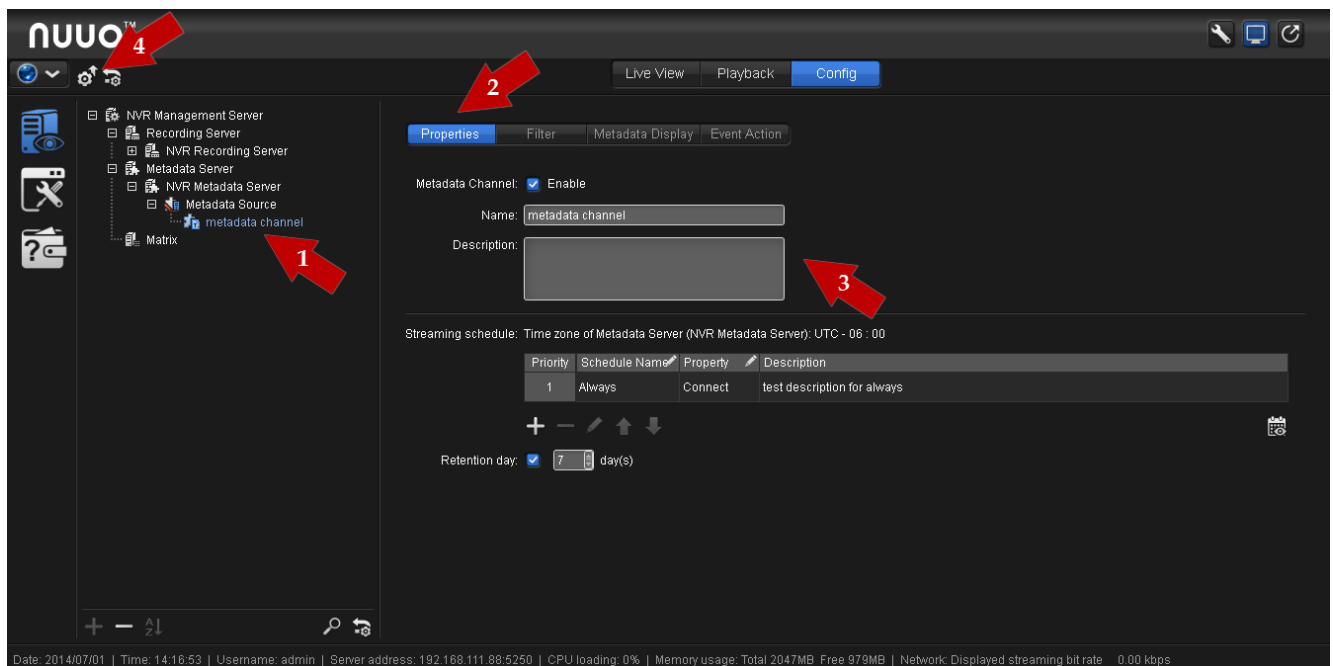
Creation of new metadata source

Creation of new metadata channel

To create new metadata channel the following actions should be performed successively (See pic. *Creation of new metadata channel*):

1. select created at the previous stage metadata source;
2. click «+» at the bottom of the tab;
3. specify metadata channel parameters in **Properties** tab:
 - a. **Name** - name of new source, e.g. **Metadata Source**;
 - b. **Description** - short description of source, e.g. Autocode
4. click **Commit Config** button at the top part of window to save configurations.





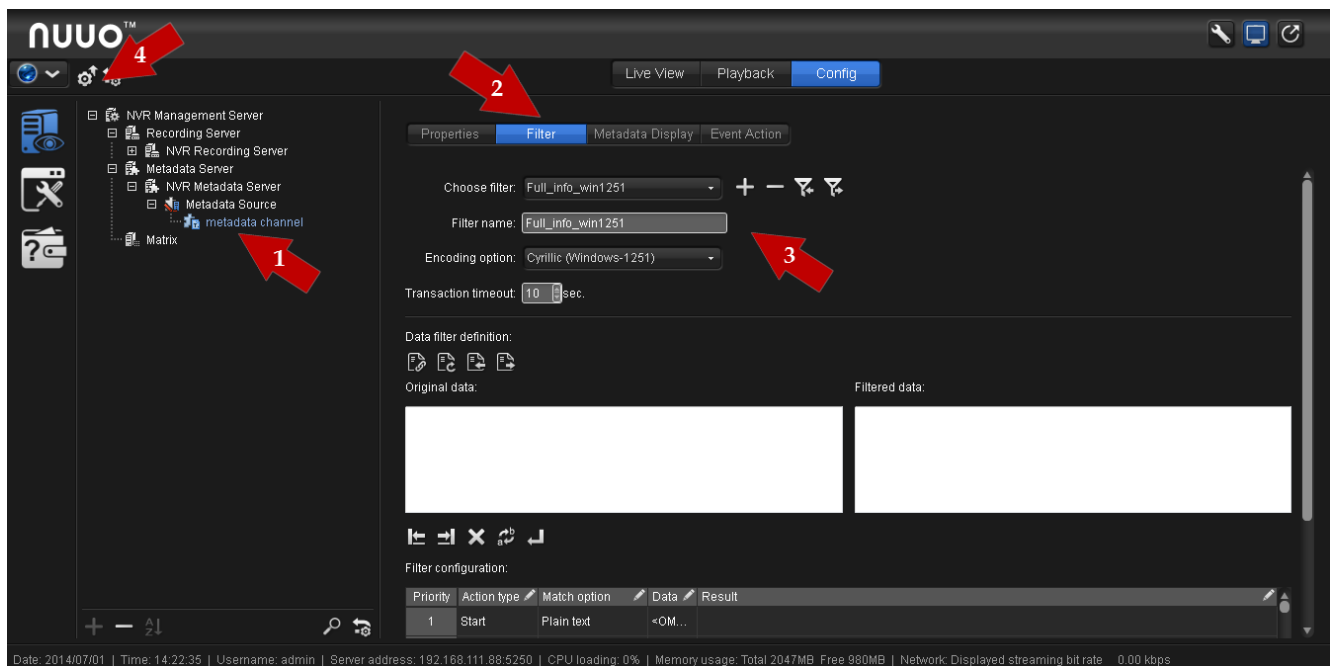
Creation of new metadata channel

Specification of filtering parameters

To specify filtering parameters the following actions should be performed successively (See pic. *Specification of filtering parameters*):

1. select created at the previous stage metadata channel;
2. on the upper panel select **Filter** tab;
3. specify event filtering parameters:
 - a. **Choose filter** - choose one of filters provided with AutoCode NUUO. If necessary filter is not available in the list, export it by clicking **Export** preliminarily;
 - b. **Filter name** - choose one of filters provided with AutoCode NUUO. If necessary filter is not available in the list, export it by clicking **Export** preliminarily;
 - c. **Encoding option** - choose encoding of received data. In filters provided with AutoCode NUUO, filter names contain names of necessary encoding;
4. click **Commit Config** button at the top part of window to save configurations.





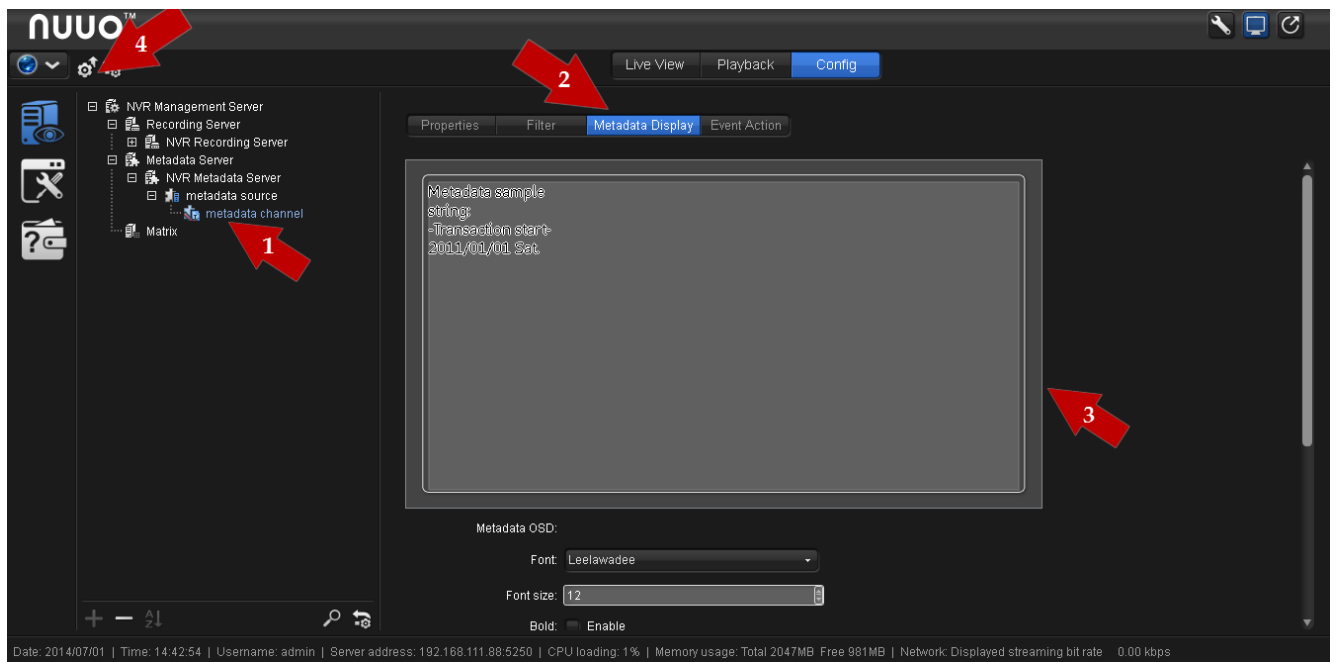
Specification of filtering parameters

Specification of metadata displaying parameters

To specify the way of metadata displaying in the video the following actions should be performed successively (See pic. *Specification of metadata displaying parameters*):

1. select created at the previous stage metadata channel;
2. select **Metadata Display** on the upper panel;
3. specify event displaying parameters:
 - a. specify font, its size and position of metadata in window with video;
 - b. **Associated Camera** - select camera on which data about recognized events should be displayed in Live View mode;
4. click **Commit Config** button at the top part of window to save configurations.





Specification of metadata displaying parameters



Processing video and LNPR in AutoCode NUUO

To configure AutoCode NUUO and Crystal System get video from ;

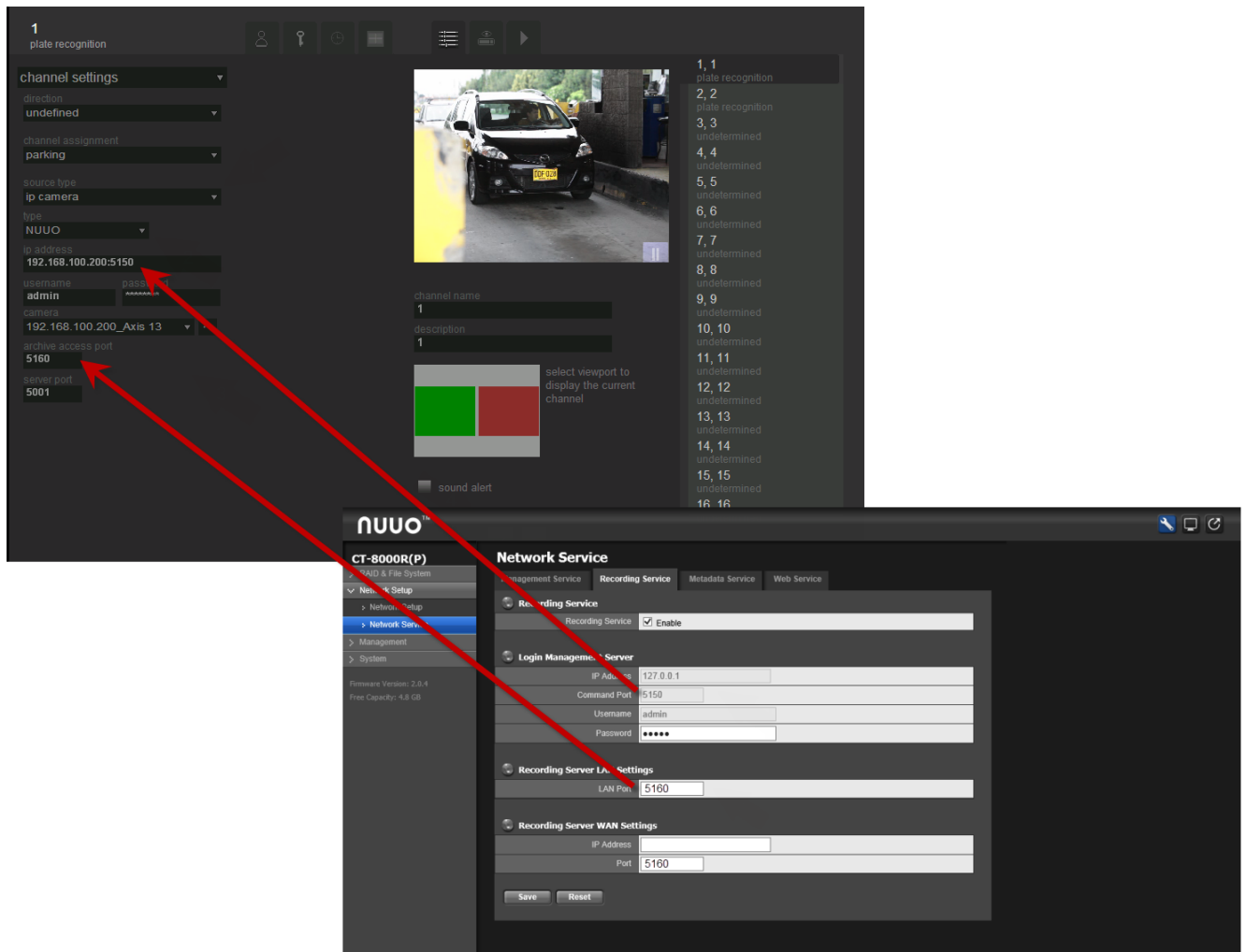
- receive video and archive from Crystal System;
- process received video and LNPR in AutoCode NUUO;
- send data on recognized plates to Crystal System.

Receiving video and archive from Crystal System

To receive video and archive from Crystal System in AutoCode NUUO, perform the following steps (see pic. *Receiving video and archive from Crystal System*):

1. open the **Settings** tab in AutoCode NUUO and go to the **Channel settings** options there;
2. select the channel that will receive video from Crystal System in the right part of the window;
3. define the following channel parameters:
 - a. **Source type** - Ip Camera;
 - b. **Type** - NUUO;
 - c. **IP Address** - the IP address of from Crystal System: **Login Management Server (Command Port)**
 - d. **Username** and **Password** - the username and password of Crystal System;
 - e. **Camera** - click on “...” button to connect to Crystal System and synchronize the camera list. After that select the **Camera** from the list appear.
 - f. **Archive Access Port** - Recording Server LAN Settings (LAN Port)
4. select the viewport to display this channel stream;
5. save the settings.





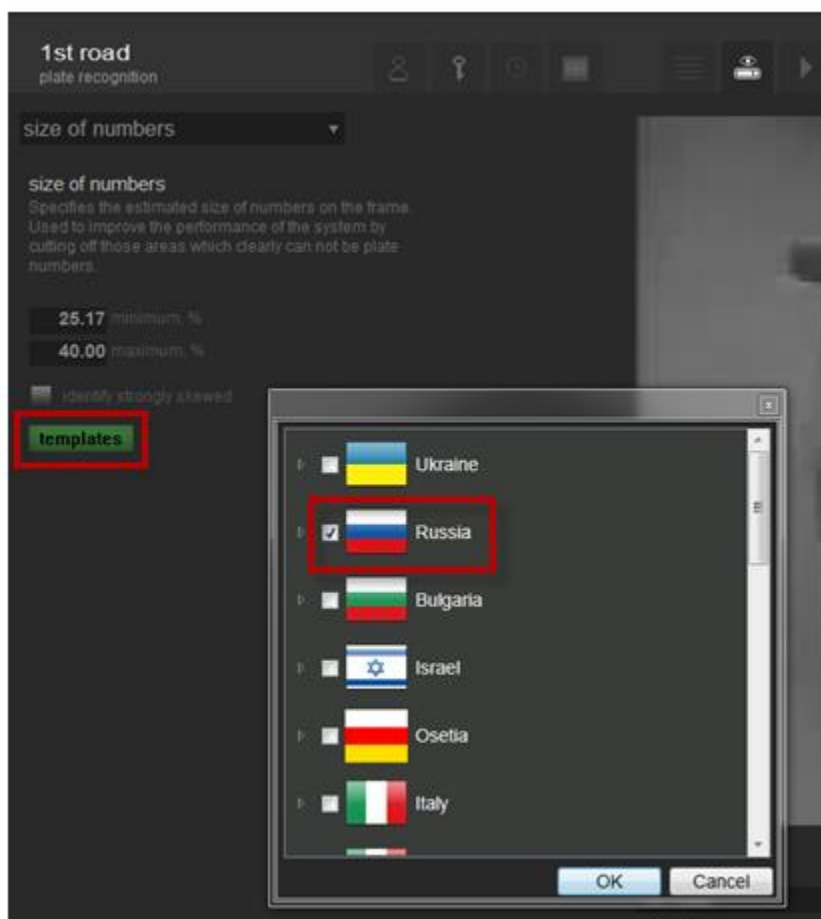
Receiving video and archive from Crystal System

LNPR in AutoCode NUUO

To start LNPR in AutoCode NUUO, perform the following steps (see pic. *LNPR in AutoCode NUUO*):

1. open the **Settings** tab in AutoCode NUUO and go to the **Channel settings** options there;
2. select channel assignment as Parking, Demonstration or Flow (depending from AutoCode version);
3. go to the **Recognition settings** and select **Size of numbers** option in the menu;
4. click on the **Templates** button and select your country;
5. save the settings.





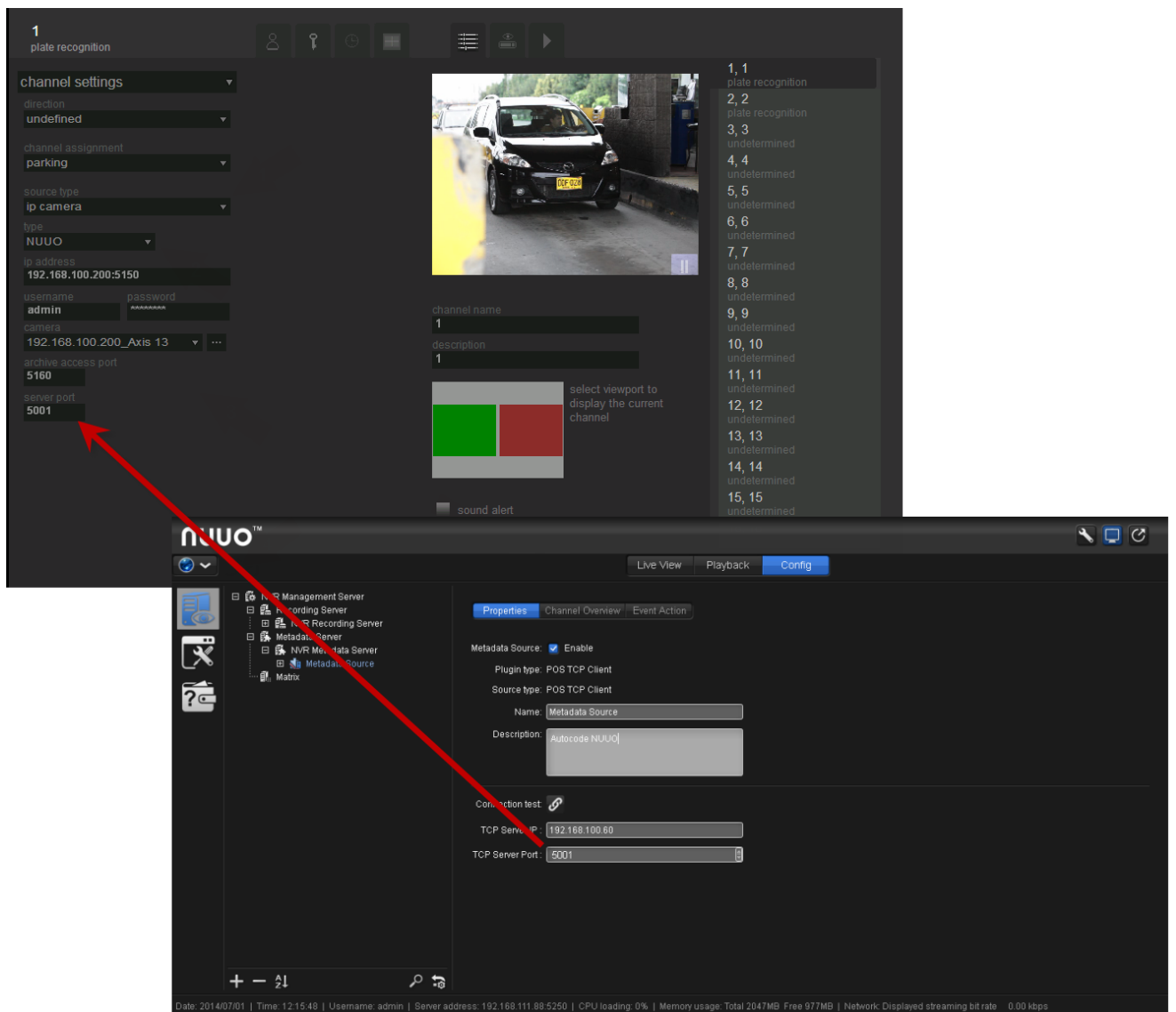
LNPR in AutoCode NUUO

Sending data on recognized plates to Crystal System

To send data on recognized plates to Crystal, perform the following steps (see pic. *Sending data on recognized plates to Crystal System*):

1. open the **Settings** tab in AutoCode NUUO and go to the **Channel settings** options there;
2. select the channel that receives video from Crystal System in the right part of the window;
3. paste **Server Port - TCP Server Port** pasted in Crystal System during the **metadata source creation**;
4. save the settings.





Sending data on recognized plates to Crystal System

