



# **Metadata Plugins**

Access Control, License Plate Recognition  
and Point of Sale Solutions

## Hardware & Software Installation **User Manual**

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## SYSTEM INTRODUCTION

NUUO Metadata plugins enable users to build integrated solutions with 3<sup>rd</sup> party devices, currently including Access Control, License Plate Recognition and Point of Sale Solutions. Please contact your local distributor or sales service for the latest list of integrated solutions from various suppliers.

### Access Control

NUUO Main Console accepts feeds from Access Control servers via Ethernet. You may configure several doors or entrances under each Access Control Source. Filtered info will be displayed on chosen channels, for example ID numbers or names of personnel upon each entry or exit.

### License Plate Recognition

NUUO Main Console also accepts feeds from License Plate Recognition Systems via Ethernet. Several lanes may be configured under each LPR Source. Filtered info will be displayed on chosen channels, including license plate numbers or other additional information.

### Point of Sale

NUUO POS provides a platform to display financial transaction data upon video surveillance channels. The architecture is as below; POS transaction data flows to NVR by Ethernet. Each Cash Register with an external receipt printer is connected by DB9 cable. The transaction information delivered in R232 format can be converted to Ethernet through SCB-C31A POS data capture convertor. Alternatively, Cash Registers that support TCP/IP or COM port output can connect directly to the system without the SCB-C31A box.

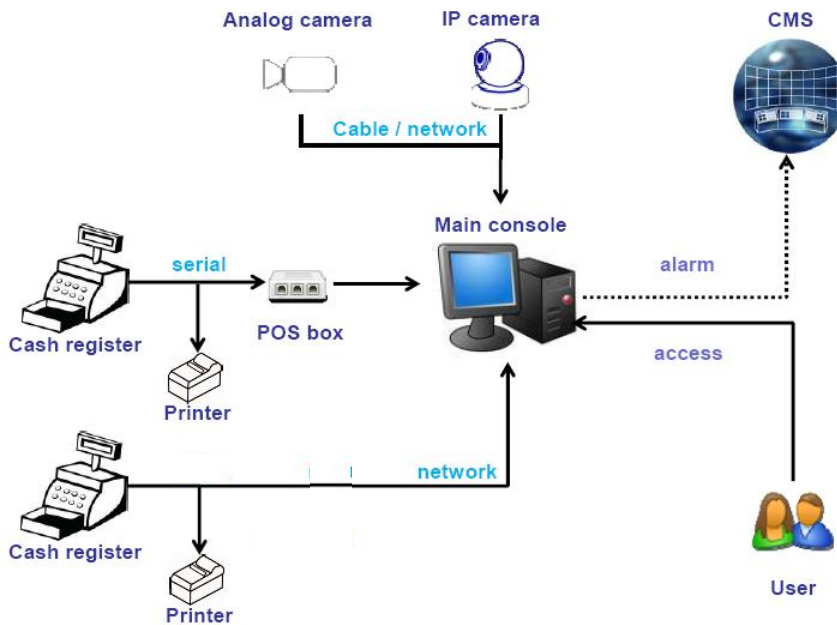
## Definition of Terms

Terms	Definition
<b>Metadata Original Data</b>	Original data from Metadata devices. Usually with a lot of symbols and no line feed.
<b>Metadata Transaction</b>	Filtered result by user defined tag filter.
<b>Metadata Event Log</b>	Smart Guard Event Log from metadata transaction. Includes transaction start, transaction end, POS cash register open and other user defined events. Abbreviation of Metadata Log.

## System Introduction

To give you a better idea of the various source types supported by the Point of Sale solution, the following sections (Hardware Installation and Software Installation) are dedicated to POS Metadata and the hardware POS box only. If you are not planning to install this solution, please proceed directly to page 8 for Software Setup.

### POS System Diagram



### Product Specification

NUUO Capture Box SCB-C31A POS	
<b>Input</b>	RS232
<b>Output</b>	Ethernet
<b>DC In</b>	DC +10V to +15V
<b>Power consumption</b>	500 mA
<b>Operating Temperature</b>	-20 to 65°C
<b>Operating Humidity</b>	0-90 % Non-Condensing
<b>Baud Rate</b>	110 bps to 230.4 kbps
<b>Data Bits</b>	5, 6, 7 or 8
<b>Stop Bits</b>	1, 1.5 or 2
<b>Parity</b>	None, Even, Odd, Mark, Space
<b>Flow Control</b>	None, RTX/CTS, XON/XOFF, DTR/DSR

## HARDWARE INSTALLATION

### SCB-C31A POS data capture convertor

To connect Cash Register, Printer, and SCB-C31A POS data capture convertor together, please follow below steps:

Step 1: Please refer the user manual to setup Cash Register and printer.

Step 2: Using a “Y-shape” DB-9 cable, one DB-9 female connect to POS system and one DB-9 male connect to the receipt printer cable (Provided by printer vendor).

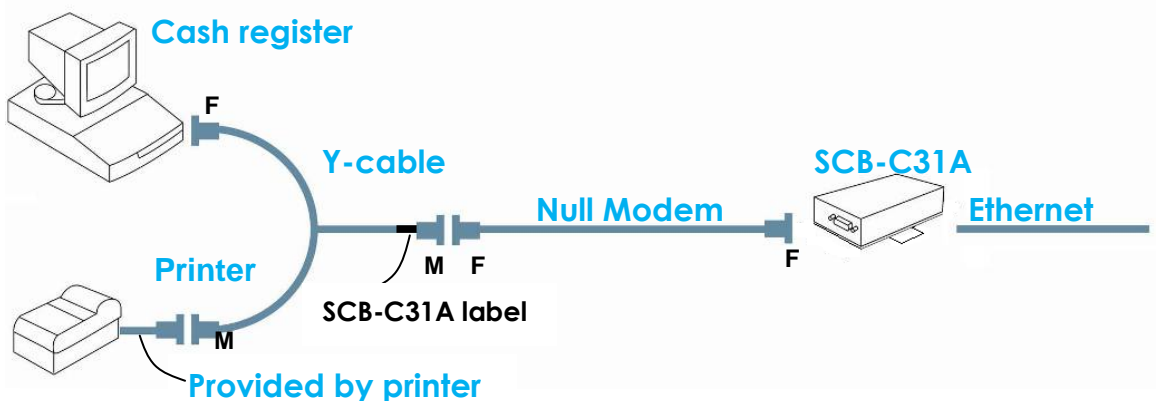
Step 3: Using another DB-9 male (marked SCB-C31A) connect to SCB-C31A POS Data Capture R232/Ethernet convertor with Null modem.

*Note:* There are two kinds of serial cable: Straight pass-through and Null-Modem. The connection between SCB C31A POS Data capture box and Y-cable must be null modem (in package).

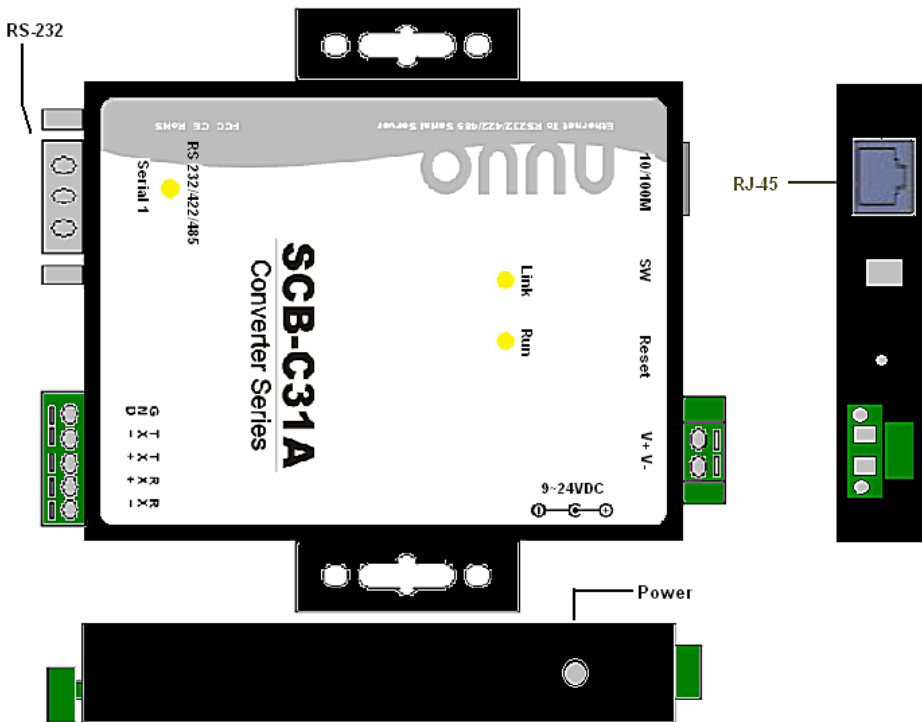
Step 4: Check the system switch of the SCB-C31A POS is switch to OFF, OFF position.

Step 5: Connect power source with SCB-C31A POS.

Step 6: Connect SCB-C31A POS with internet port by RJ45 LAN cable.



## System Introduction



The LED Indicators:

Link LED: Ethernet cable connection and data active.

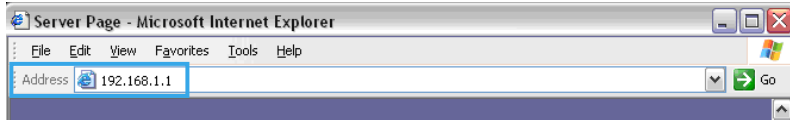
Run LED: System is ready (Blinking).

Serial 1: Transmitting/Receiving Indicator.

## SOFTWARE INSTALLATION

### SCB-C31A POS data capture convertor

Step 1: Use IE-browser to setup SCB-C31A POS, the default IP address is **192.168.1.1**

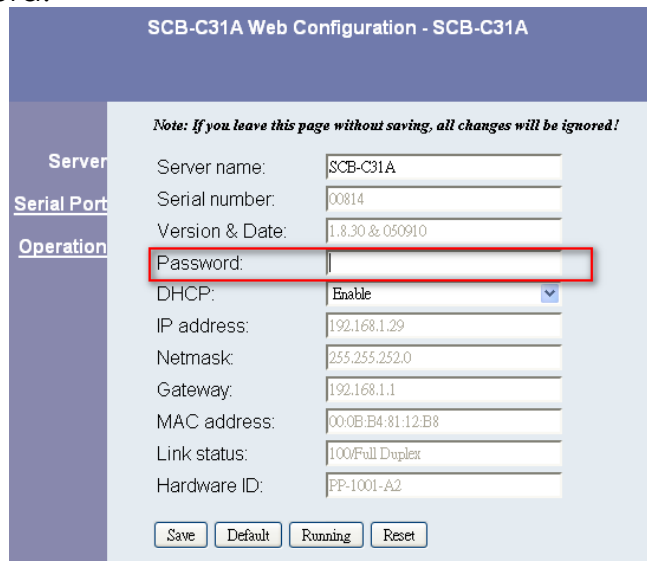


Step 2: Setup IP address and password, and then setup IP address.

*Note:* Each time you switch the page of the web, please click **Save** at first. If you leave this page without saving, all changes will be ignored.

Step 3: Setup Password if needed. Password is only using to activate a security feature on the serial server. Once a password is entered it will be required to access the menu and make change of configuration when access.

*Note :* Please write down the Serial number and MAC address, these two parameters are necessary when users forget the password.

A screenshot of the "SCB-C31A Web Configuration - SCB-C31A" web interface. The page has a dark blue header and a light blue body. On the left, there is a vertical navigation menu with "Server", "Serial Port", and "Operation" options. The main content area contains a form with the following fields: "Server name:" (SCB-C31A), "Serial number:" (00814), "Version & Date:" (1.8.30 & 050910), "Password:" (highlighted with a red box), "DHCP:" (Enable), "IP address:" (192.168.1.29), "Netmask:" (255.255.252.0), "Gateway:" (192.168.1.1), "MAC address:" (00:0B:E4:81:12:B8), "Link status:" (100/Full Duplex), and "Hardware ID:" (PP-1001-A2). At the bottom of the form are four buttons: "Save", "Default", "Running", and "Reset". A note at the top of the form reads: "Note: If you leave this page without saving, all changes will be ignored!".

Step 4: Setup according to your POS or Cash Register. Usually all devices are default setting, you can reserve your time to pass this step.

### System Introduction

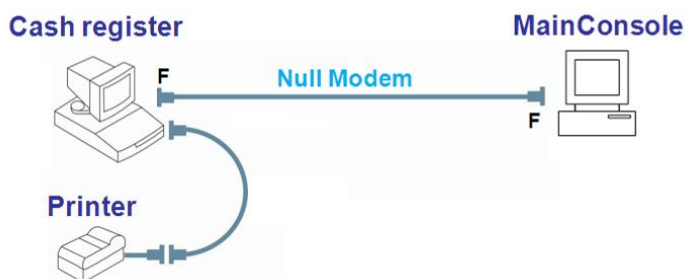
Step 5: Please **restart/reset** the box after changing configurations to active setup.

To reset the unit manually apply power, insert a small plastic tool, and press lightly depressing reset located between the switch (refer page 5). Hold for 5 seconds and release. The Link and Run light will go out and turn back on. The SCB-C31A POS will revert to the last setting.

*Note:* Every time you change the configuration of SCB-C31A POS, please check the above settings, especially maximum connection and Remote IP address to avoid connection fail.

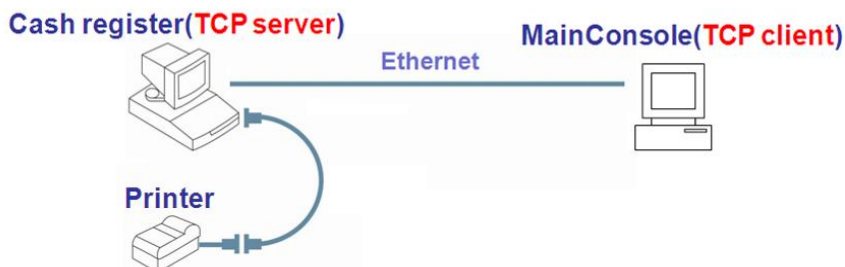
#### Connection via COM Port

Please install system according to following diagram:



#### Connection via TCP Client

Please install system according to following diagram:



#### NUUO NVR/DVR/Hybrid system installation

Please refer to the Main Console user manual to complete system installation with the NVR/DVR/Hybrid systems installation CD.





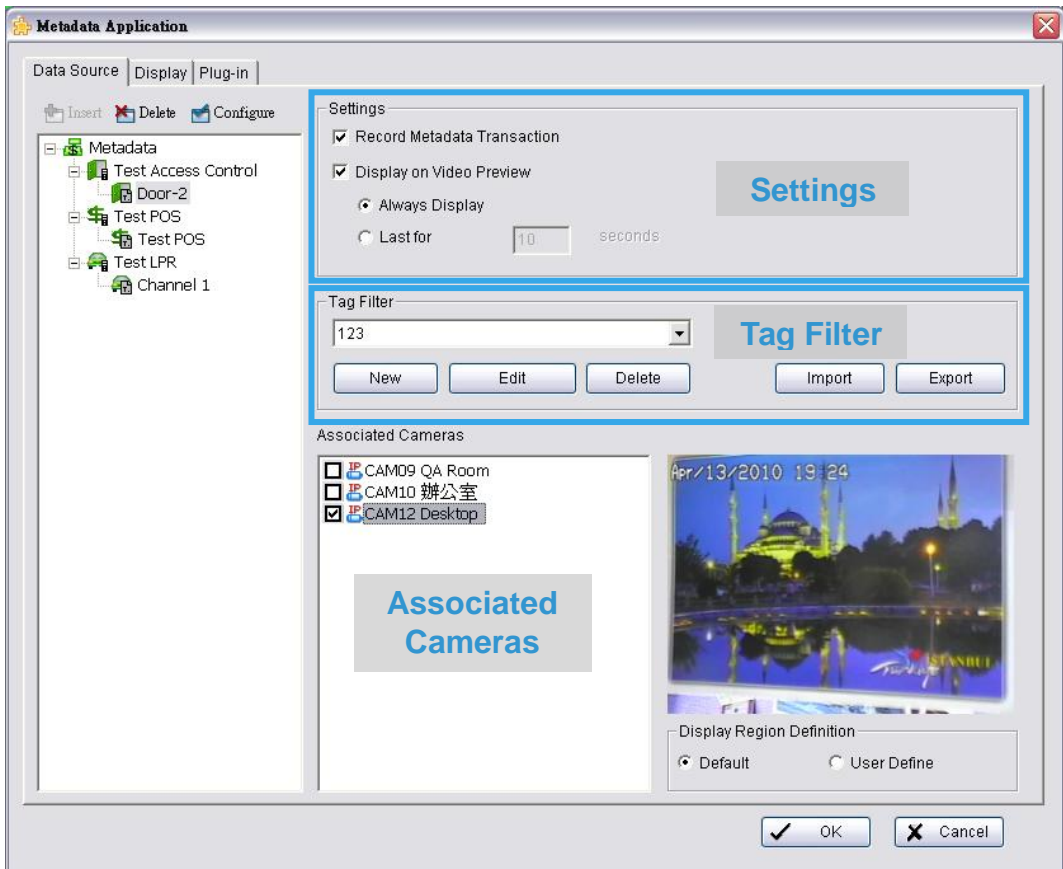
## System Setup

### SOFTWARE SETUP

Each NUUO Main Console system can manage up to 64 Access control, 64 License Plate Recognition and 64 POS cash register devices. This section will teach you how to setup configuration of your system.

#### 1. Metadata Device Management

Run **Main Console** and click on  **Metadata Application** from the  **Config** menu to open the Metadata Application window.




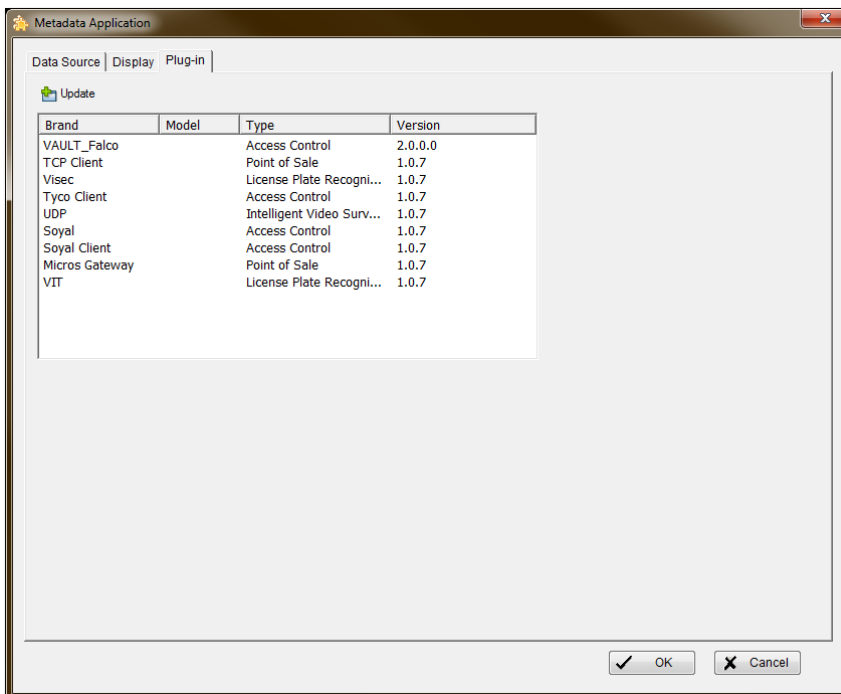
You are able to Insert/Delete/Configure Metadata devices in this window. Click on any device under the Metadata Tree to configure the settings and tag filter of the device. Associated cameras will be shown in the preview window below.

### System Setup

#### 1.1. Install 3<sup>rd</sup> party Plug-in



You are able to update/upgrade/repair Metadata plug-in devices in this window. Click on update to update/upgrade/repair Metadata plug-in devices.

1. Download 3<sup>rd</sup> party Plug-in from <http://www.nuuo.com>
2. Run **Main Console**, click on  **Metadata Application** from **Config** menu to open Metadata Application window, then switch to **Plug-in** tab.
3. Click **Update** to update/upgrade/repair Metadata plug-in device. Select .nmp file for metadata update/upgrade/repair.
3. Click **OK** to save configuration.



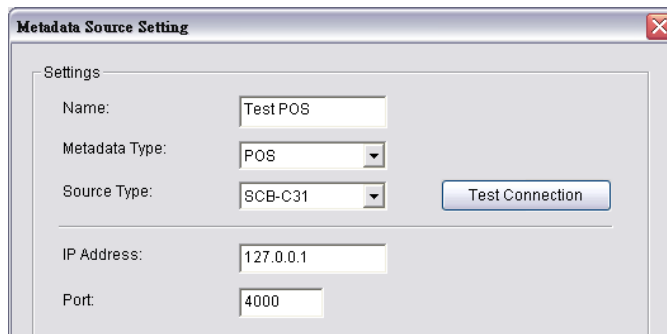
## 1.2. Insert/Delete/Configure Metadata devices

### To insert a metadata source

1. Click the  Insert button when the **Metadata tab** is selected  **Metadata** to open the Metadata Source Setting window.
2. Configure metadata source info, including **Name**, **Metadata Type**, **Source Type**, **IP address** and **Port**.

Note:

For Metadata Type POS, there are 4 source types available including SCB-C31, SCB-C31\_A, COM Port and TCP Client.







The screenshot shows a window titled "Metadata Source Setting" with a close button in the top right corner. Inside the window, there is a "Settings" section with the following fields and values:

- Name: Test POS
- Metadata Type: POS
- Source Type: SCB-C31
- IP Address: 127.0.0.1
- Port: 4000

A "Test Connection" button is located to the right of the Source Type field.

3. After setting, click **Test Connection** to test Metadata source connection. If all the settings are correct, the system will popup "Metadata server "name (IP)" is available" message to confirm the setting is successful.

### To insert a metadata channel




1. Click the  Insert button when any **Metadata Source tab** is selected (  **Test Access Control** ,  **Test POS** or  **Test LPR** ) to add a metadata channel.

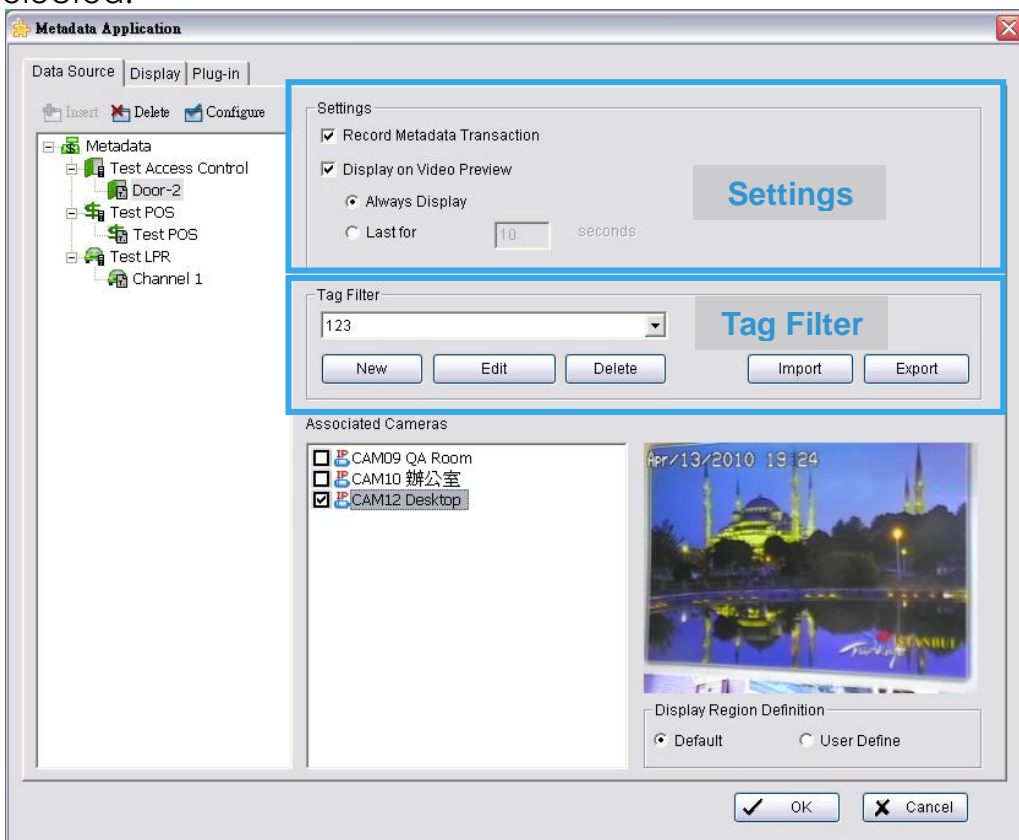
Note:

For Metadata Type **Access Control**, you may add several metadata channels under one source. Please define each **Door Name** exactly the same as your settings under the third party Access Control system. For Metadata Type **LPR**, you may add several metadata channels under one source. Please define each **Lane Name** and make sure settings under the third party LPR system are exactly the same.

### System Setup

#### To configure settings and tag filters for each metadata channel

1. The **Settings** and **Tag Filter** section will be available when any of the **Metadata Channel tabs** (Access Control , POS  or LPR ) is selected.



### Settings

#### Record Metadata Transaction:

Select this checkbox to record metadata transaction data in MS database. The MS data will allow searching and display on associated recording video, and the MS data files can also provide third-party application to analysis.

#### Display on Video preview:

Select this checkbox to display metadata transaction data overlay on associated camera live videos.


There are two options regarding transaction data display:

Choose **Always Display** to keep transaction data on video until the next transaction data is received.


Choose **Last for \_\_\_ seconds** to customize the period of time you wish the transaction data to last on the video.

2. Select Tag Filter (For details on the Tag Filter, refer to page 12).
3. Under **Associated Cameras**, check to select cameras you wish to display with metadata transaction data overlay on live video.
4. In **Display Region Definition** option, setup display area for each camera video.
  - a. **Default**: The default display area is below the camera OSD, on the upper-left corner.
  - b. **User Define**: Right-click on video preview and drag a rectangle to define the display area.
5. Click **OK** to save.

To delete a metadata source/channel

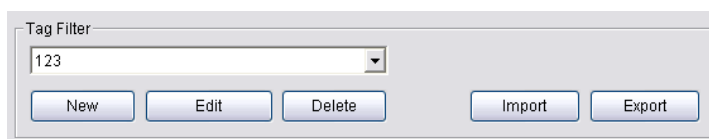
1. Choose metadata source/channel.
2. Click  Delete button to remove this metadata source/channel from the system.

To configure metadata source/channel

1. Choose metadata source/channel.
2. Click  Configure button to open Metadata Source Setting window.
3. Please refer to **Insert metadata device** section (page 10) to modify configuration.

### 1.3. New/Edit/Delete/Import/Export Tag Filter

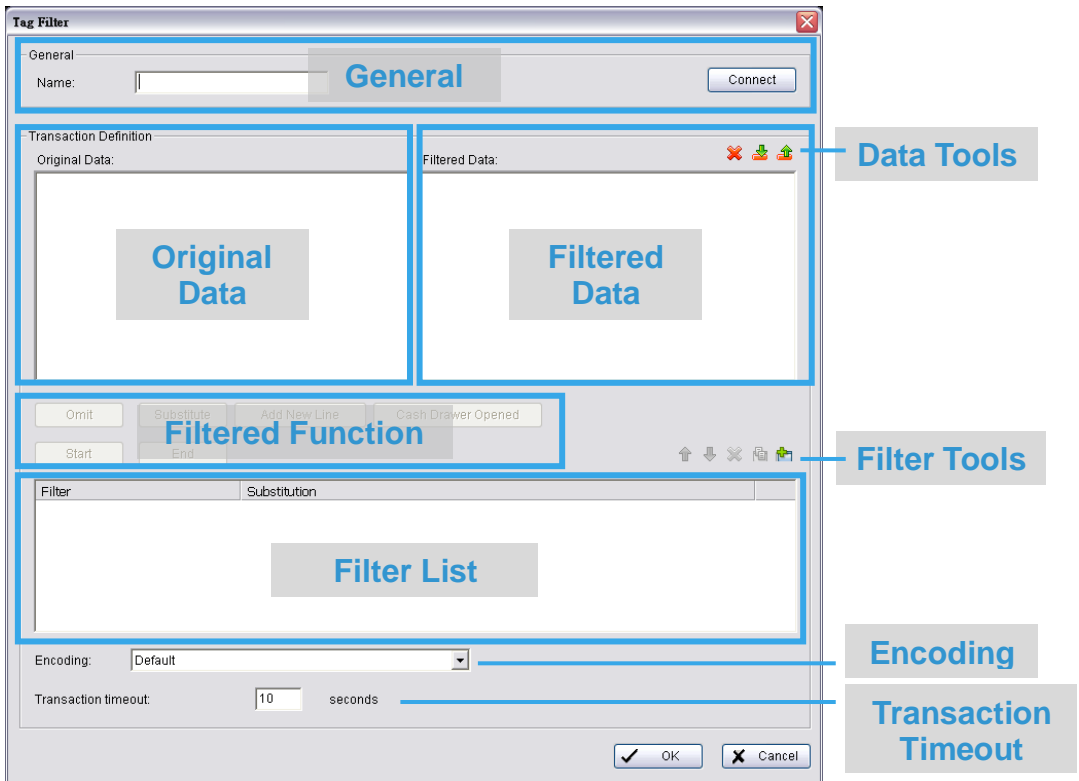
Raw transaction data received from metadata systems must be filtered to make it comprehensible. NUUO also provides a simple default tag filter that filters out common EPSON commands. Users can edit other customized filters based on this default tag filter.



To add a new Tag Filter

## System Setup

1. Click on the **New** button to open the Tag Filter window. This window includes the following sections:
  - a. **General**: Setup Tag Filter name. Connect button for test connection.
  - b. **Original Data**: Show original transaction data from POS device.
  - c. **Filtered Data**: Show filtered data after defined filter.
  - d. **Filtered Function buttons**: Tool used to define filter type.
  - e. **Filter List**: A list of all filters.
  - f. **Data tools**: Includes import/export buttons to import/export original binary data, and a clear button to clear original/filtered data windows.
  - g. **Filter tools**: Includes upper/down tool to arrange priority of each filter, or remove filters from list. You may also edit existing filters or add new ones.
  - h. **Encoding**: Choose desired language.
  - i. **Transaction Timeout**: Define a maximum time length for transactions to end when no more data is received.



2. Enter name of tag filter.
3. Click **Connect** button to capture metadata transaction data from metadata device.
4. Please operate metadata device to send transaction data to filter. The original transaction data will show on the left window.  
*Note:* If you don't want the data to keep importing when editing filters, please click the **Disconnect** button to stop connection.
5. Data Tools:
6. Start to edit tag filters:  
Click and highlight text from Original Data window, then use the six buttons below to define filters. The filtered transaction data will show on the right window.

*Note:* If you don't want the data to keep importing when editing filters, please click the **Disconnect** button to stop connection.

**Export:** Capture and export original Binary data

**Import:** Reload exported Binary data.

**Clear:** Remove data from Original Data and Filtered Data windows.



- a. **Omit:** Neglect the selected text which is meaningless or not important. The text will disappear in the filtered data window on the right.

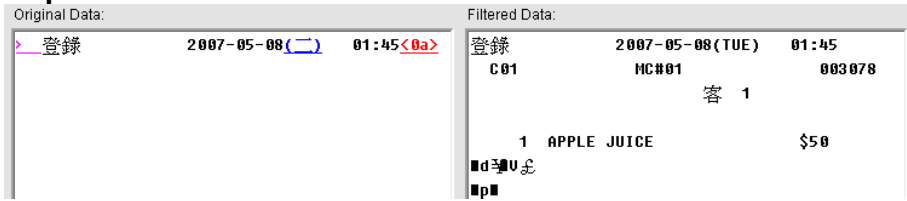


- b. **Substitute:** Use other words to replace the selected text. The system will pop up a substitution panel for replacing desired words. The text on the filtered data window will show the result.

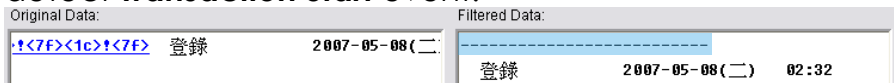


- c. **Add New Line:** Define the selected text as the symbol for changing to a new line. The result will show on the right filtered data table.

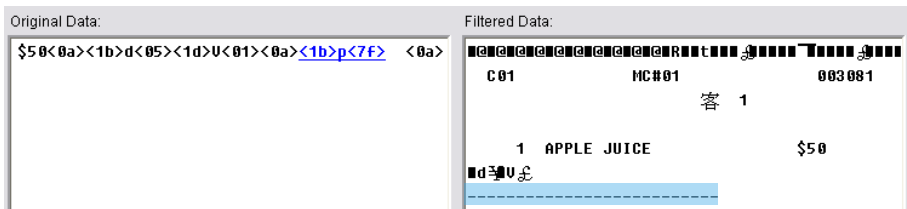
System Setup



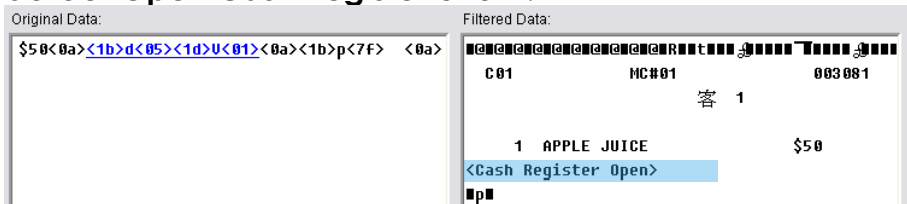
- d. **Start:** Define the selected text as the symbol for the beginning of a transaction. It will be replaced as a line as shown below.  
*Note:* This setup is also used as detection tag for Smart Guard to detect **Transaction Start** event.



- e. **End:** Define the selected text as the symbol for the end of a transaction. It will be replaced as a line as shown below.  
*Note:* Not defining a transaction end may result in error or lost info. If you do not define this filter please be sure to define a transaction timeout. For more info please refer to p.16.  
 This setup is also used as detection tag for Smart Guard to detect **Transaction End** event.






- f. **Cash Register Opened:** Define the selected text as the symbol for cash register opened. The filtered data will show the **<Cash Register Open>** mark as below.  
*Note:* This setup is also used as detection tag for Smart Guard to detect **Open Cash Register** event.



7. Filter Tools:

The buttons are used to change priority of sub filter criteria. The filter will operate by order of list; the filters on top will take effect

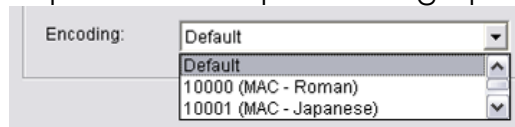


first. The  button will remove the filter from this list. Click on   Edit / Add to configure tag filters or add new ones.

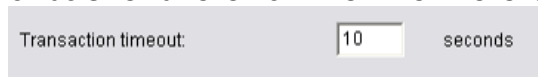
Filter	Substitution
<0a>	<New Line>
<1d>V<01>	<Transaction End>
<1b>d<05>	<Cash Register Open>
<1b>!	<Transaction Start>
<1c>!	

8. Click on **OK** to save configuration.

*Note:* If codepage of POS printer is different with Windows OS, please correspond with POS printer to setup Encoding option.



If there is no defined **Transaction End** event, please define a maximum time length for transactions to end when no more data is received.



### To Edit Tag Filter

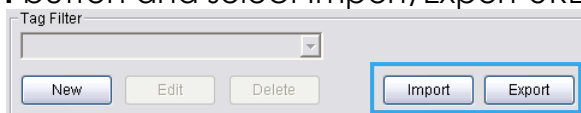
1. Select Tag Filter name from drop-down menu,
2. Click **Edit** button
3. Configure the Tag Filter window.
4. Click **OK** to save configuration.

### To Delete Tag Filter

1. Select Tag Filter name from drop-down menu,
2. Click **Delete** button

### To Import/Export Tag Filter

1. Click **Import/Export** button and select Import/Export URL.




2. Click **Open/Save** to Import/Export Tag Filter.

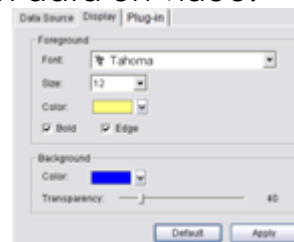
### System Setup

3. After importing tag filters, users can simply select a tag filter from the drop-down menu without editing a new one.

#### 1.4. Setup metadata Display Font

This option allows to setup font of metadata transaction data on video.






1. Run **Main Console**, click on  **Metadata Application** from **Config** menu to open Metadata Application window, then switch to **Display** tab.
2. For metadata transaction data displayed overlay video, select the font, font size, font color and any font effects user wants.



## 2. Smart Guard Detection





### 2.1. Metadata Event

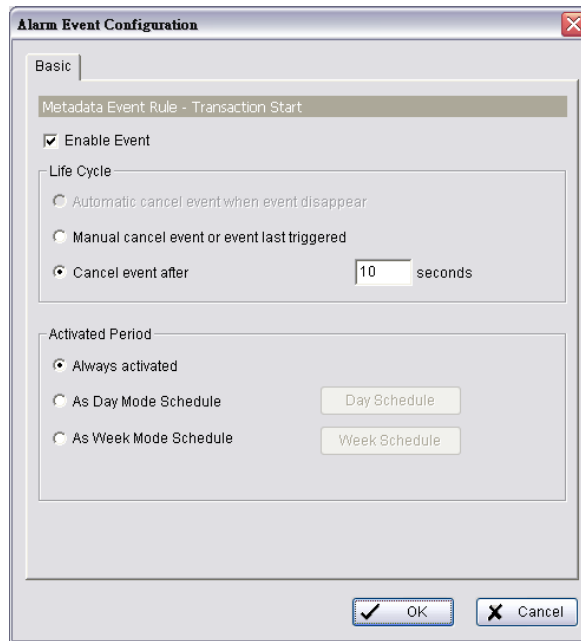
Each Metadata System has four to five Event types:

-  **Transaction Start** - Detect any transaction beginning
-  **Transaction End** - Detect any transaction ending
-  **Open Cash Register** - Detect any cash register opening (Only available on POS metadata devices)
-  **User Defined** - Detect any condition which is defined by user
-  **Connection Lost** – Detect any connection abnormal event between the metadata and Main Console systems.

*Note:* First three events require a pre-defined detection tag, please refer to Edit Tag Filter section (see page 14).

To add a new Metadata Event

1. Select metadata device (,  or ) from device tree.
2. Click on  button to open Select Event Window.
3. Select Event Type.
4. Setup basic option of Event.



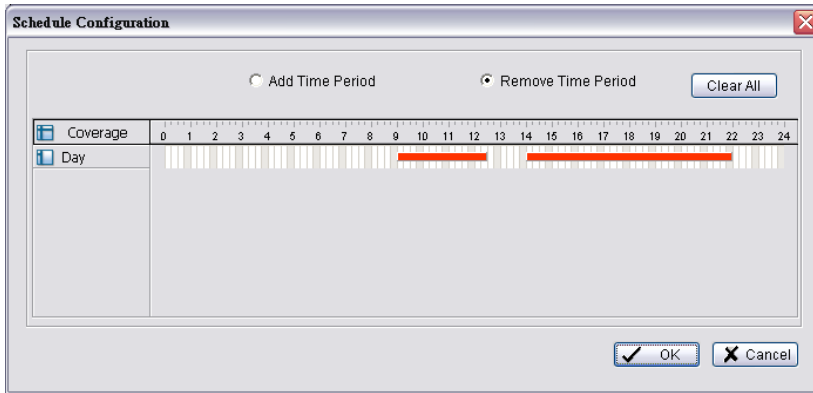
- a. **Enable Event:** Check the box to activate.
- b. **Life Cycle:**
  - **Manually cancel event or event last triggered:**  
The alarm/action will continue until being canceled from Main Console (Start>Open Event Report>Cancel All Events). The user currently not at the seat watching the screen will be notified by the alarm.
  - **Cancel event after \_\_\_ seconds:**  
Enable checkbox and setup the timeout seconds to cancel the event after the time that you set whether the events disappear or not.
- c. **Activated Period:**
  - **Always Activated:**  
Allow alarm to be activated at all times.
  - **As Day Mode Schedule**  
Customize a specific time range for the alarm to be activated. The alarm will be available daily according to your settings.

Click on **Day Schedule** to configure the schedule.

Choose **Add Time Period** and drag on the coverage bar to define an activated schedule.

## System Setup

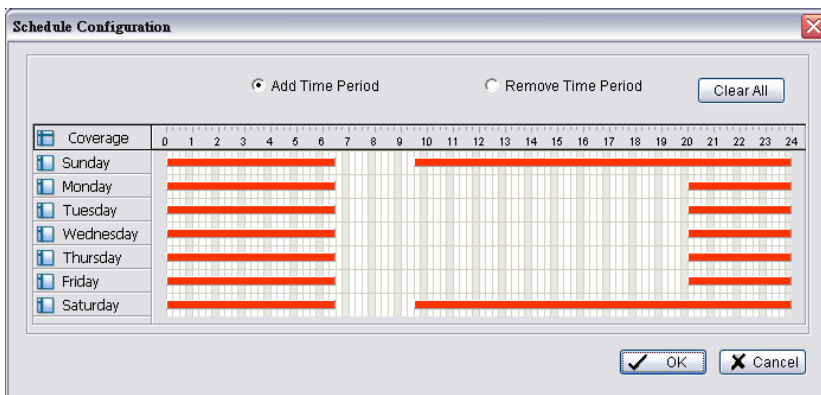
Choose **Remove Time Period** and drag on the coverage bar to subtract from existing schedules.  
Click on **Clear All** to remove all settings.



### ➤ As Week Mode Schedule

Customize a weekly based time range for the alarm to be activated.

Click on **Week Schedule** to configure the schedule.  
Choose **Add Time Period** and drag on the coverage bar to define an activated schedule.  
Choose **Remove Time Period** and drag on the coverage bar to subtract from existing schedules.  
Click on **Clear All** to remove all settings.



5. Setup advanced option of User Defined Event.

a. **Event name**: Enter the name of user defined event.

## b. Alert Condition:

## ➤ Text:

Enter the text user wants to detect in Keyword column.

Enable **Match case** to search for names where the case matches the letters you entered. Or enable **Match whole word** to search for the terms you entered as a whole word.

Check **Using Regular Expression** to include regular expression commands in search.

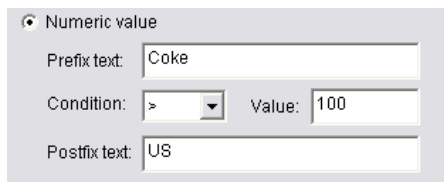
## ➤ Numeric value:

Enter a number as the condition of event and then choose one of the symbols (  $\leq$   $<$   $=$   $>$   $\geq$  ) to define the numeric value.

For advanced settings, use **Prefix text/Postfix text** to detect special text before/after the value's condition.

For Example: To detect Coke > 100 US, please insert as below:

### System Setup



• Numeric value

Prefix text:

Condition:  Value:

Postfix text:

*Note:* The value is also case sensitive, you must key in “,” symbol to search for 10,000US.

➤ **External rule:**

This feature allows developers to customize event rules. Main Console can send filtered transaction data to third-party applications and receive reply on whether to trigger alarm or not. Please contact [service@nuuo.com](mailto:service@nuuo.com) for details.

c. **Frequency:**


➤ **Count:**

Alarm will be triggered when this event happens over specific number of times.

➤ **Count Period:**

Resets count after each new transaction, or under specified period of time.




### To Copy Event to other Metadata Devices







1. Right-click on metadata event which you want to copy.  
For example, click , and select **copy**.
2. Switch to other metadata devices where you want to post event.  
Right-click on metadata device, and select **post**.

*Note:* If you want to copy metadata event to all devices, simply select **copy to all** of right-click menu on step 1.

### 2.2. Instant Action on Metadata Event

Each metadata event can be configured to trigger 9 instant response actions:

-  **On Screen Display** - A red warning message will be flashing on the screen of associated cameras.
-  **Play Sound** – Play sound warning.
-  **Send E-mail** - Send E-mail with event type, time, and snapshot of first associated camera.

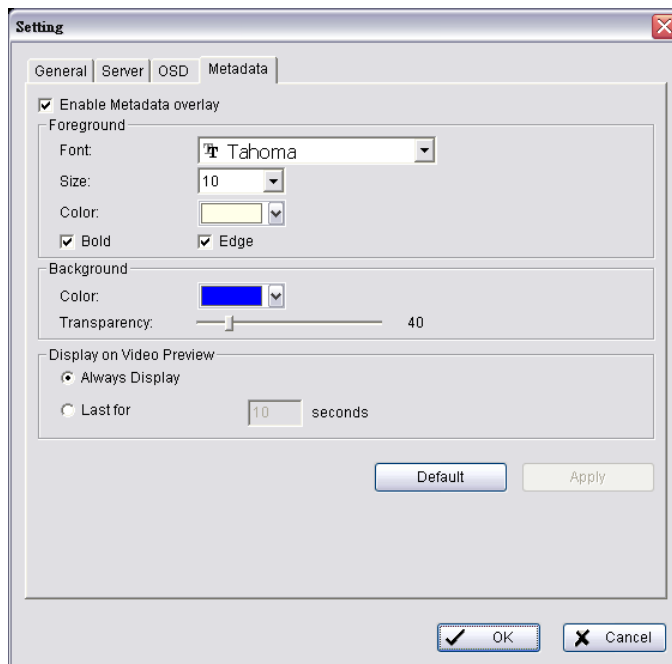
-  **Phone Call** – dial phone call.
-  **PTZ Preset Go** – Control PTZ camera move to a preset point or patrol around preset points.
-  **Signal Digital Output** - Triggers traditional alarming output devices.
-  **Send a SMS message** - Send a SMS message with event type and time.
-  **FTP** – Upload snapshot of first associated camera to FTP.
-  **Popup E-Map on Event** – Auto popup E-map window to show metadata device location.

*Note:* For detailed configuration please refer to Chapter 4.2 - the *Action* section of Main Console user manual.

### 3. Playback

To enable metadata overlay option

1. Click  to open Setting window, and then switch to **Metadata** tab.



2. Check the box of **Enable Metadata overlay**, the transaction data will be overlaid on associated camera's recording video.
3. Set up overlay configuration; select the font, size, font color and any font effects user wants.
4. Setup option of **Display on Video**

### System Setup

**Preview** to display metadata transaction data overlay on associated camera live videos.



**Always Display:** To keep transaction data on video until the next transaction data is received.

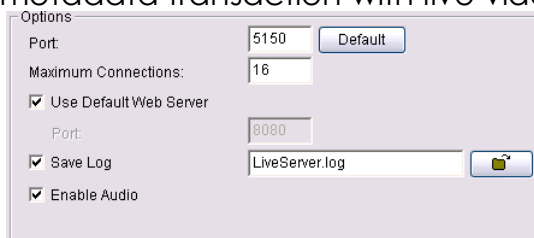
**Last for 10 seconds:** Each transaction data is displayed to last on video for 10 seconds.

### 4. Remote Network Service

NUUO systems allow users to access metadata info on remote sites.

To Start Network Service of Main Console


1. Open  **Config** menu and click **Network Service** to open Network service window
2. Switch to  Live Streaming tab.
3. Setup the options of connection and then click **start** to allow remote view metadata transaction with live video.

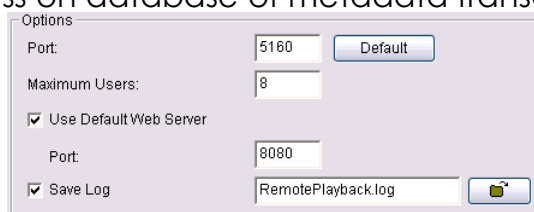


The screenshot shows the 'Options' dialog box for Network Service. It contains the following fields and controls:

- Port: 5150 (with a 'Default' button)
- Maximum Connections: 16
- Use Default Web Server
- Port: 8080
- Save Log (with a text field containing 'LiveServer.log' and a file selection icon)
- Enable Audio

**Note:** Port 5150 is used when connecting via NUUO Remote Live Viewer application. Web server port 8080 is used when connecting via IE-browser. Please refer to chapter 5.14 - *Network Service* section of Main Console user manual for details.

4. Switch to  Remote Playback tab.
5. Setup the options of connection and then click **start** to allow remote access on database of metadata transaction.



The screenshot shows the 'Options' dialog box for Remote Playback. It contains the following fields and controls:

- Port: 5160 (with a 'Default' button)
- Maximum Users: 8
- Use Default Web Server
- Port: 8080
- Save Log (with a text field containing 'RemotePlayback.log' and a file selection icon)

**Note:** Port 5160 is used when connecting via NUUO Playback application. Web server port 8080 is used when connecting via



IE-browser. Please refer to chapter 5.14 - *Network Service* section of Main Console user manual for details.

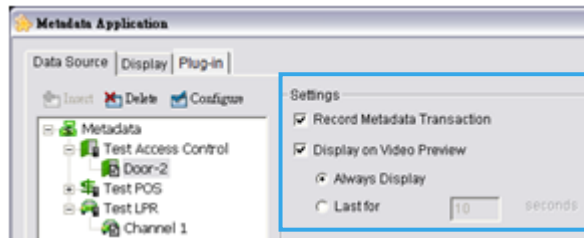
## Operation Tool

### OPERATION TOOLS

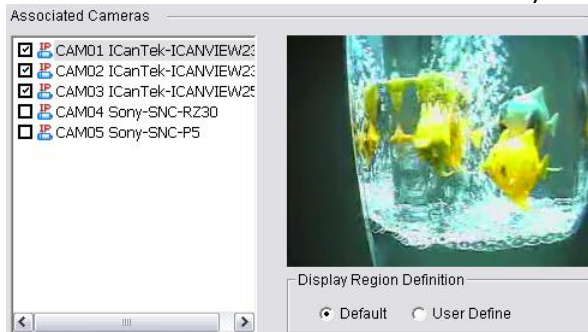
#### 1. Live Display

To Display Metadata Transaction Data Overlay

1. Enable **Display on Video Preview option**.  
Please go to **Main Console > Config > Metadata Application >** select metadata channel and check the box of this option.



2. Select **Associated Cameras**.  
In Associated Cameras setup region, select cameras to overlay metadata transaction data. Click **OK** when you're done.



3. View the Live Video with metadata transaction data  
After setup, the transaction data will show on live video when transactions happen.




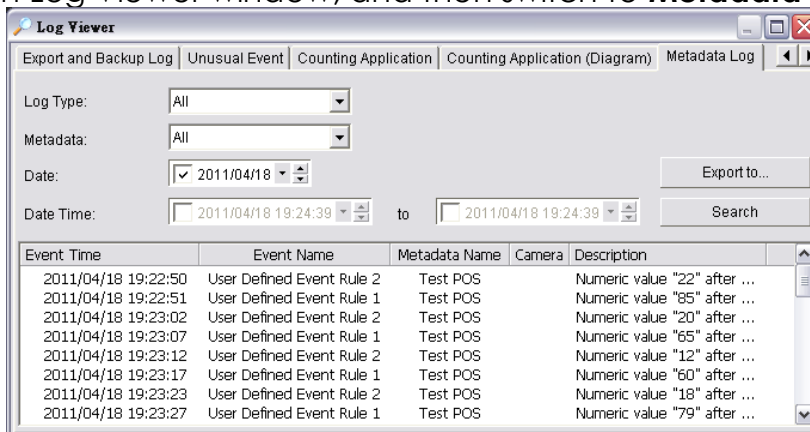
## 2. Log Viewer Search

Log Viewer is a tool used to search **Unusual Events** (Smart Guard Events), **System Logs**, **Counting Application** results, and **Metadata Logs** (Metadata Event Logs). For detailed description, please refer to chapter 5.12 - *Log Viewer* section of Main Console user manual.

*Note:* If you want to search the transaction data, please use Metadata Search tool on the next section - Metadata Transaction Data Search on page 28.


To Search Metadata Event via Main Console

1. Run **Main Console**, click on  **Log Viewer** from **Config** menu to open Log Viewer window, and then switch to **Metadata Log** tab.



2. Select **Log Type** and **Metadata** device from drop-down menu.
3. Setup time criteria to search for special **Date** or a period of **Date&Time**.
4. Click on **Search**, and search result will list on table.

*Note:* If you want to copy the search result to other application, simply click on **Export to...** button to save result as an excel table.

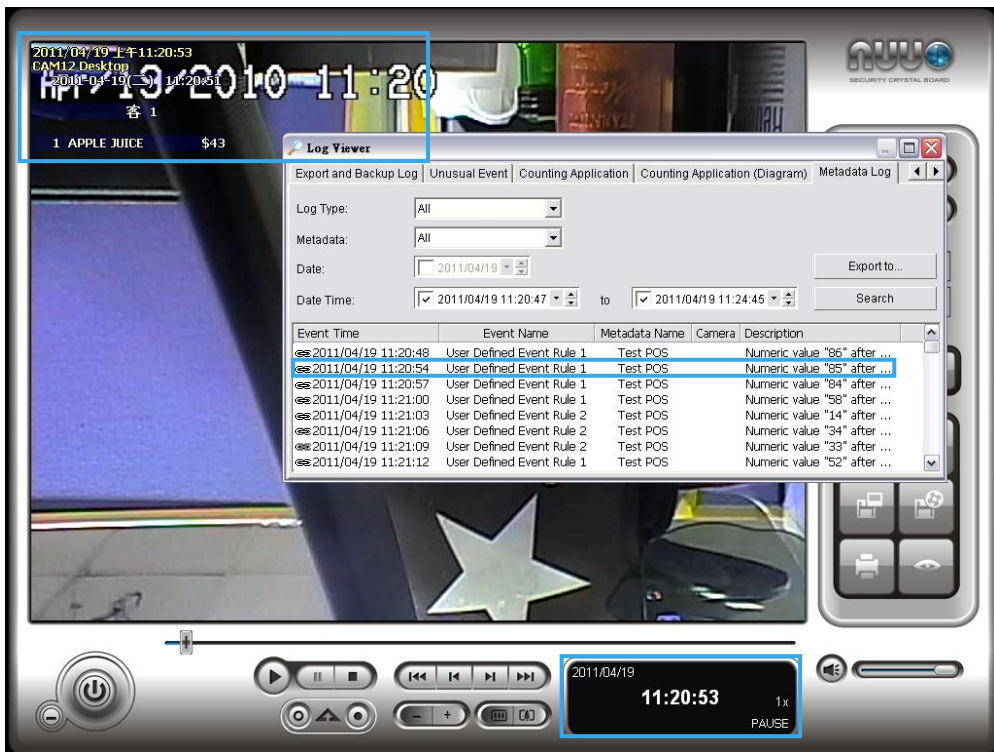
*Note:* A link () will appear next to each event time where video is available. By clicking on the link, an instant playback window will pop up to show recorded video.

## Operation Tool



To Search Metadata Events via Playback

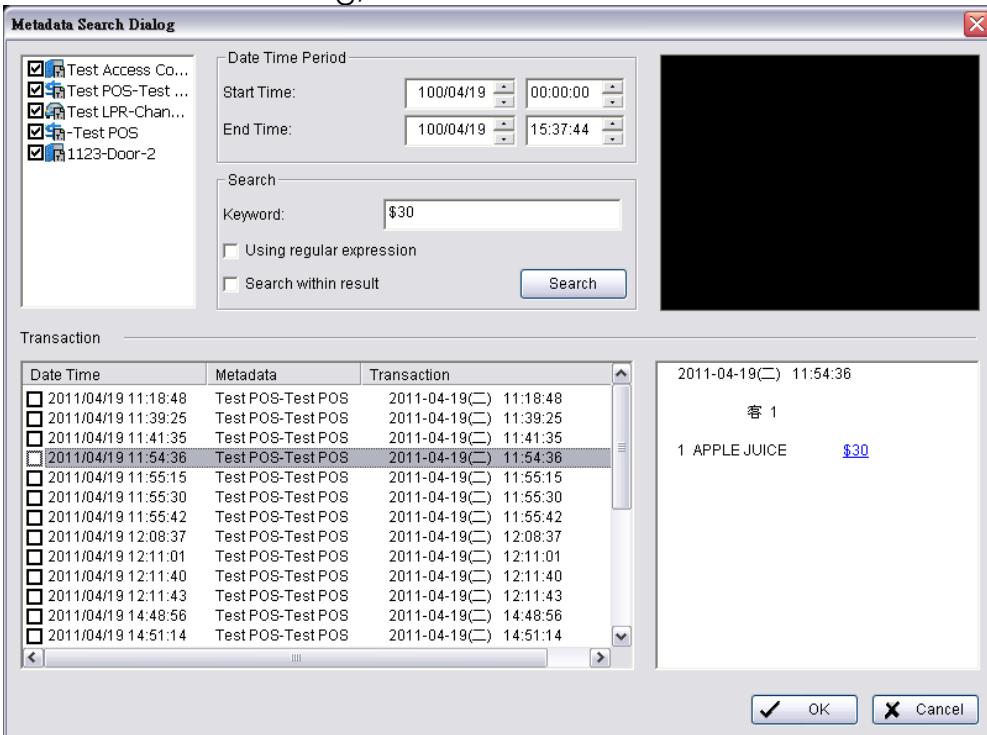
1. Run **Playback**, open record to select the video period, and click **Log Viewer** button to open Log Viewer window.
2. Follow the step 2-4 on previous section to search metadata Log.
3. Double-click on metadata log from result table, and the video will auto switch to the time of metadata log.

For Example: When clicking on a specific log from the list, the video will auto switch to the time point the event happened.



### 3. Metadata transaction data Search

**Metadata Search** tool is used to search key words of all transaction data. To open this tool, please go to **Main Console > Config > Metadata Search**. Alternatively, from Playback, click on  to open Date Time Search Dialog, and then click on  button.



In Metadata Search Dialog, please follow the steps blow to search from metadata devices, Date Time Period, or special keywords.



1. Check the box of metadata devices from the metadata list.
2. Setup Start Time and End Time in Data Time Period section.
3. Enter keyword you want to search.  
*Note:* This search is case sensitive, you must key in “,” symbol to search for 10,000US.  
*Note:* Check Regular Expression to include commands in search.
4. Click Search button, Transaction table will show results.
5. Select items from Transaction table, the whole transaction detail will show in right-down table and the record video of first associated camera will show in right upper corner.
6. Check the box of Search within result and enter keyword, it will search again within the results.

## Operation Tool

### 4. Playback video with metadata data

To view recorded video with metadata transaction data, please check you have enabled the metadata overlay option (refer to page 22). If you have started this option, the system will auto overlay transaction data when playing recording video. Below are two modes to select video period.

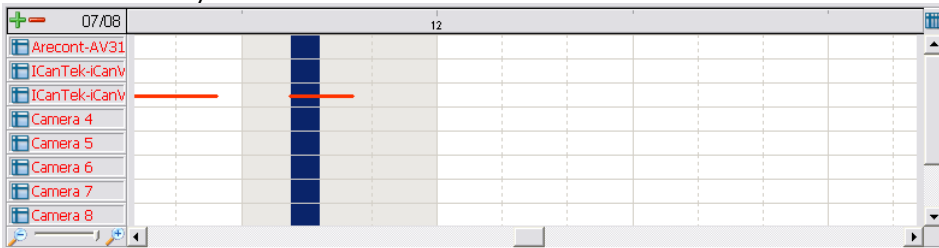
To select Period by metadata search

1. Click  on Playback application to open Date Time Search Dialog, and then click on  button
2. Follow above section 3 metadata Transaction data search to search.
3. Select the transaction data for result list, and click OK.




Date Time	POS	Transaction
<input type="checkbox"/> 2008/07/08 11:49:46	fake	登錄 2008-07-08(二) 11:4...
<input type="checkbox"/> 2008/07/08 11:49:51	fake	登錄 2008-07-08(二) 11:4...
<input type="checkbox"/> 2008/07/08 11:49:56	fake	登錄 2008-07-08(二) 11:4...
<input type="checkbox"/> 2008/07/08 11:50:01	fake	登錄 2008-07-08(二) 11:5...
<input type="checkbox"/> 2008/07/08 11:50:06	fake	登錄 2008-07-08(二) 11:5...
<input type="checkbox"/> 2008/07/08 11:50:11	fake	登錄 2008-07-08(二) 11:5...
<input type="checkbox"/> 2008/07/08 11:50:16	fake	登錄 2008-07-08(二) 11:5...
<input checked="" type="checkbox"/> 2008/07/08 11:50:22	fake	登錄 2008-07-08(二) 11:5...
<input checked="" type="checkbox"/> 2008/07/08 11:50:27	fake	登錄 2008-07-08(二) 11:5...
<input checked="" type="checkbox"/> 2008/07/08 11:50:32	fake	登錄 2008-07-08(二) 11:5...
<input checked="" type="checkbox"/> 2008/07/08 11:50:37	fake	登錄 2008-07-08(二) 11:5...
<input checked="" type="checkbox"/> 2008/07/08 11:50:41	fake	登錄 2008-07-08(二) 11:5...

4. The period you select from metadata search result will be automatically selected.



5. Click OK to go back to Playback application.




To select Period by Date&Time

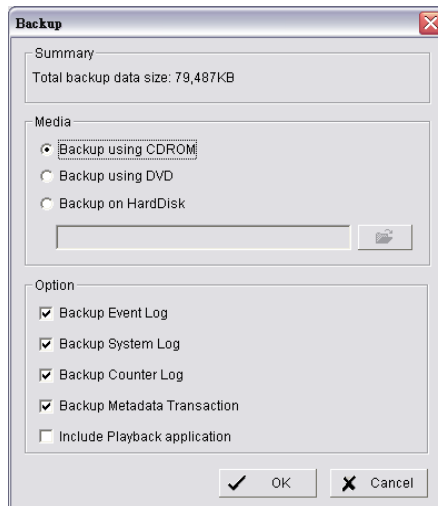
1. Click  on Playback application to open Date Time Search Dialog.
2. Setup Start Time on Date Time Period setup panel, or directly left-click and drag to select period from Time Table.
3. Click OK to go back to Playback application.

## 5. Backup video with metadata data

There are three ways to backup video with metadata transaction data under NUUO's system.

To backup via Main Console


1. Open Config menu and then click  **Backup** to open backup system window (For details, please refer to chapter 5.13 - backup section of Main Console user manual).
2. Click on  to select data time periods you want to backup. The period will be listed on the table after clicking OK. Click  to open the Backup option window.





3. Select the location where you want backup to.
4. Select which databases you want to backup.
  - a. **Event Log**: The database of smart guide detected metadata and Camera Events.
  - b. **System Log**: Including recycle, start/stop/modify schedule and network service logs.
  - c. **Counter Log**: Database of Counting Application.
  - d. **Metadata Transaction**: The database of metadata transaction data.
5. Check to include Playback application with your backup.
6. Click **OK** to backup.

## Operation Tool

To backup via Backup System

1. Click on **Start > All Programs > NUUO Surveillance System >  NUUO Backup System** to open NUUO Backup System window.
2. Following above step 2-5 on backup on Main Console to backup video with metadata transaction data.

To backup via Playback

1. Start Playback Application and use  **Open Record** tool to open video you want to backup.
2. Click  **Backup** to open backup dialog.
3. Check the period and cameras are what you want to backup.
4. Setup the location where you want to backup to.
5. Select which database you want to backup with.
6. Click **OK** to start backup.



## 6. Remote Access

NUUO systems have three remote tools to remote access metadata data: NUUO Remote Live Viewer application tool, Playback application tool, and web browser. Accessible functions are in general same as launched from the local machine (please refer to chapter 3.2 - metadata Transaction Data search section on page 28).

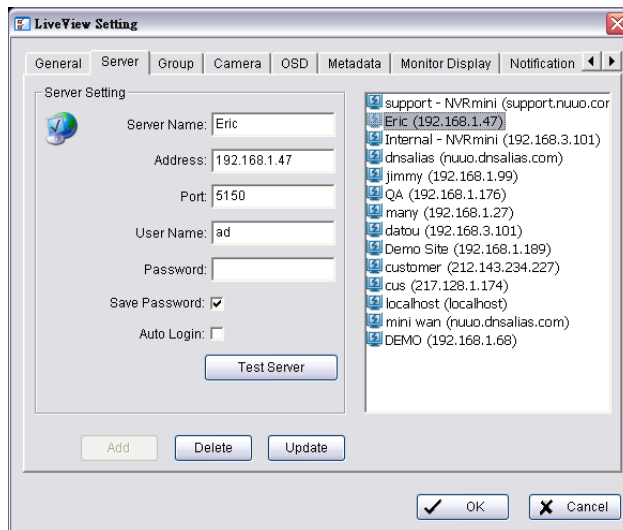
**Note:** Before using any of the remote access tools, please make sure the network service of Main Console has been started (please refer to chapter 4 - Remote Network service on page 23).

### Remote Access via Remote Live Viewer Application

1. Click General Setting to obtain LiveView Setting dialog.

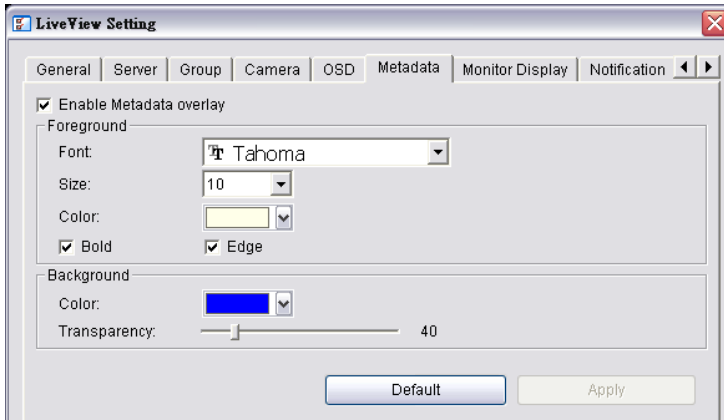


2. Select "Server" to open Server Setting window.



3. Setup Server Name, Address, Port, User Name.
4. Click on Test Server button to test the setup of server and connection is available.
5. Click Add button to add new server site to list, and then, click OK to save configuration.
6. Click on "metadata" setting to open Metadata Setting window.
7. Select "Enable metadata overlay" option to adjust OSD settings of metadata information on monitor view.


Operation Tool

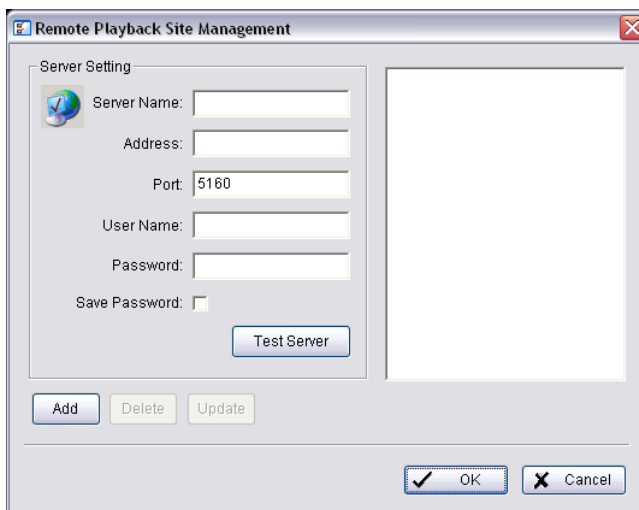


8. For metadata transaction data displayed overlay video, select the font, font size, font color and any font effects user wants.

*Note:* The status of metadata overlay will be the same with the one in Main Console. Go to Main Console> Config > Metadata Application to check if "Display on Video Preview" is enabled first, then the metadata Overlay function could be enabled.



Remote Access via Playback Application

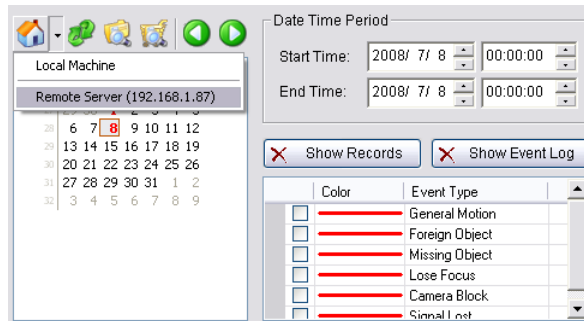
1. Go to  General Setting – Setting – Server to open Remote Playback Site Management window.



2. Setup Server Name, Address, Port, User Name
3. Click on Test Server button to test the setup of server and

connection is available.

4. Click Add button to add new server site to list, and then, click OK to save configuration.
5. Click  icon on the top of the  Open Record window to access the Remote Playback Site.
6. Follow the step on chapter 3.2 - Metadata Transaction Data search section on page 28 to search metadata transaction data.



## Remote Access via IE-browser

1. Open an Internet Explorer browser and enter the IP address or DDNS name of the server followed by the connecting port.  
Example: <http://169.254.54.171:8080/>
2. Select Remote Live Viewer / Remote Playback to launch option.
3. Follow above Remote Access section to view metadata transaction data with live video(s), or play recorded video(s) with metadata transaction data.