

Crystal NuThermal Plugin Installation Guide

Crystal will receive the video stream from Thermal RTSP Server

1. Add Video Device (Thermal Camera)

1.1 Please execute below steps twice, one for normal image another for thermal image. The filed in information should be same as Thermal Software setting

- URL/IP address : Fill in the URL/IP address as below format

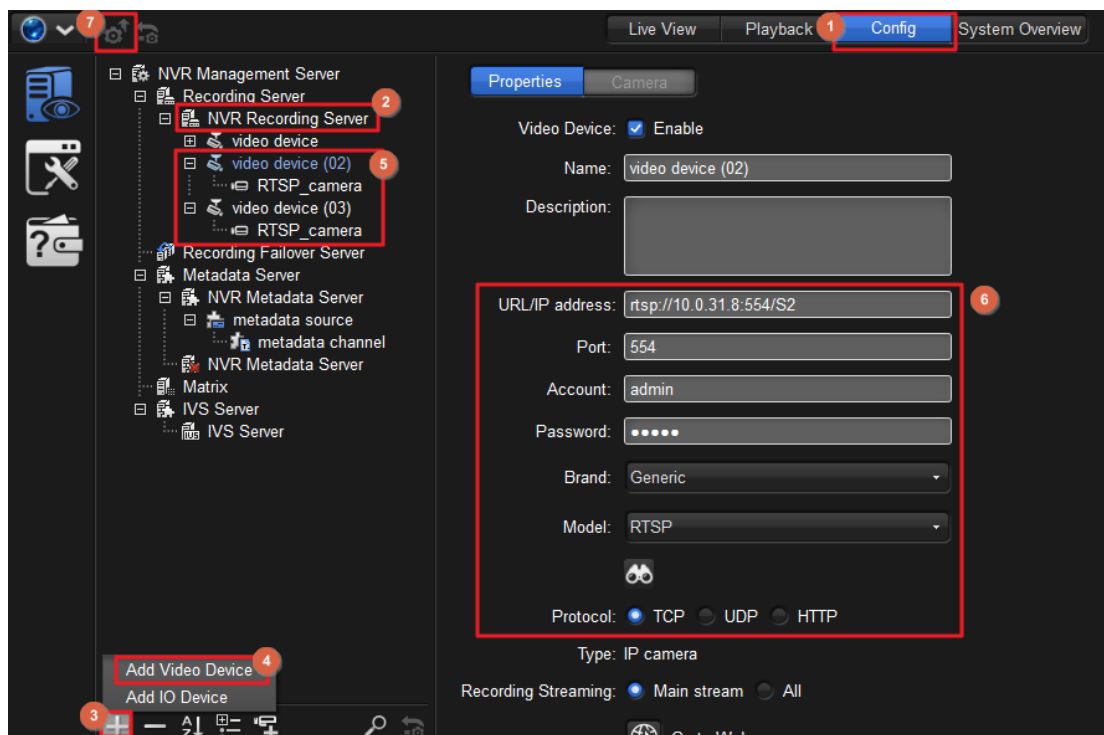
rtsp://ThermalSoftwareIP:RtspPort/CameraName

The example here is

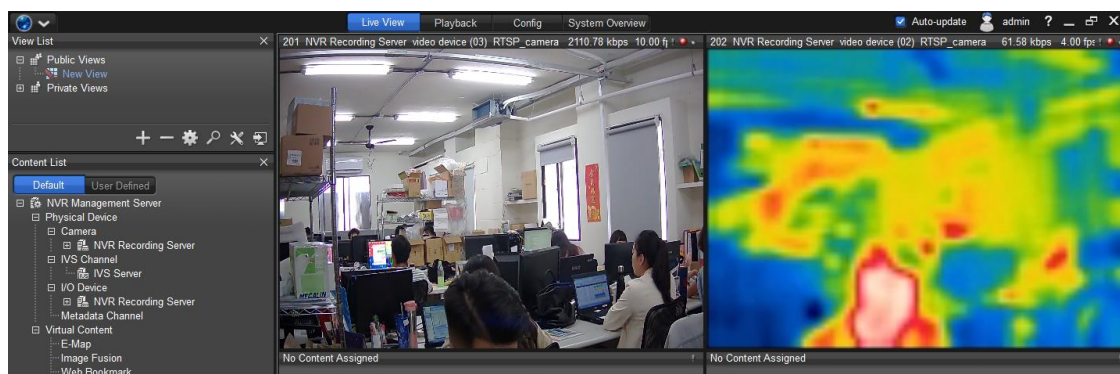
rtsp://10.0.31.8:554/S2

- Brand : Generic
- Model : RTSP
- Protocol : TCP

※Port, Account, Password should match with RTSP server setting



2. Drag and Drop the camera into Live View

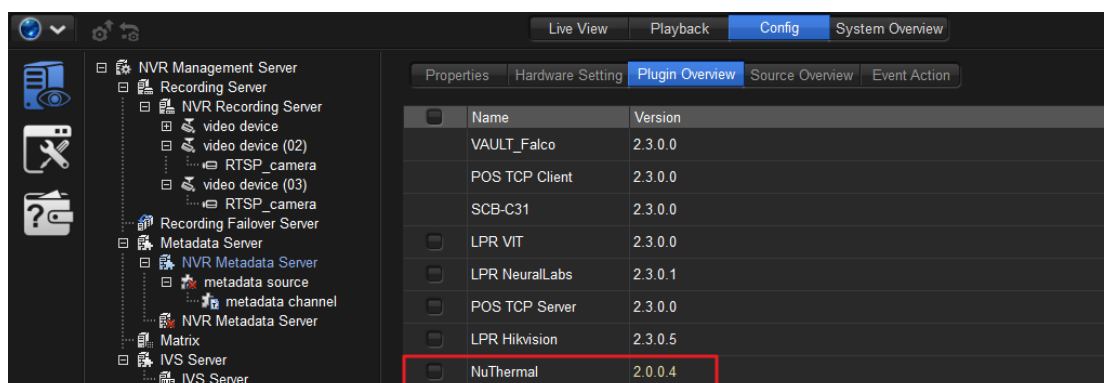
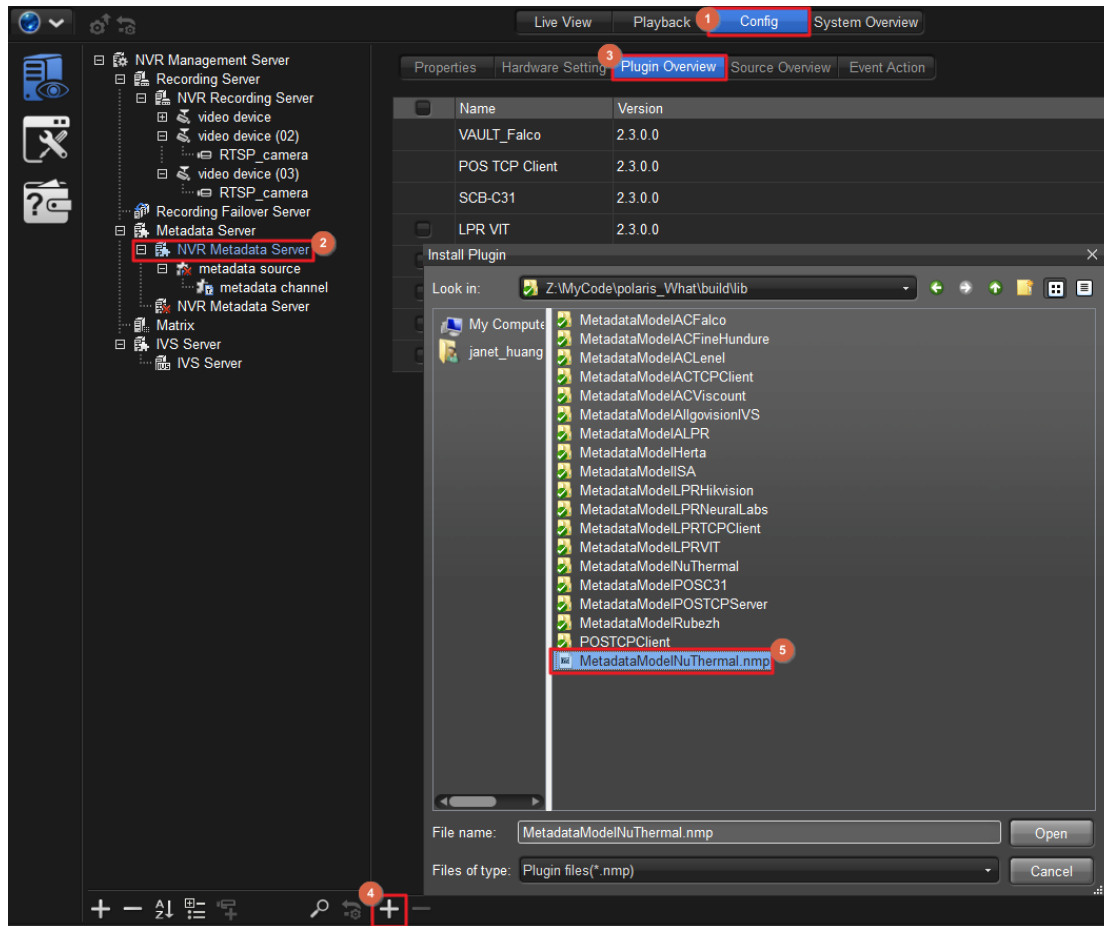


3. Metadata OSD

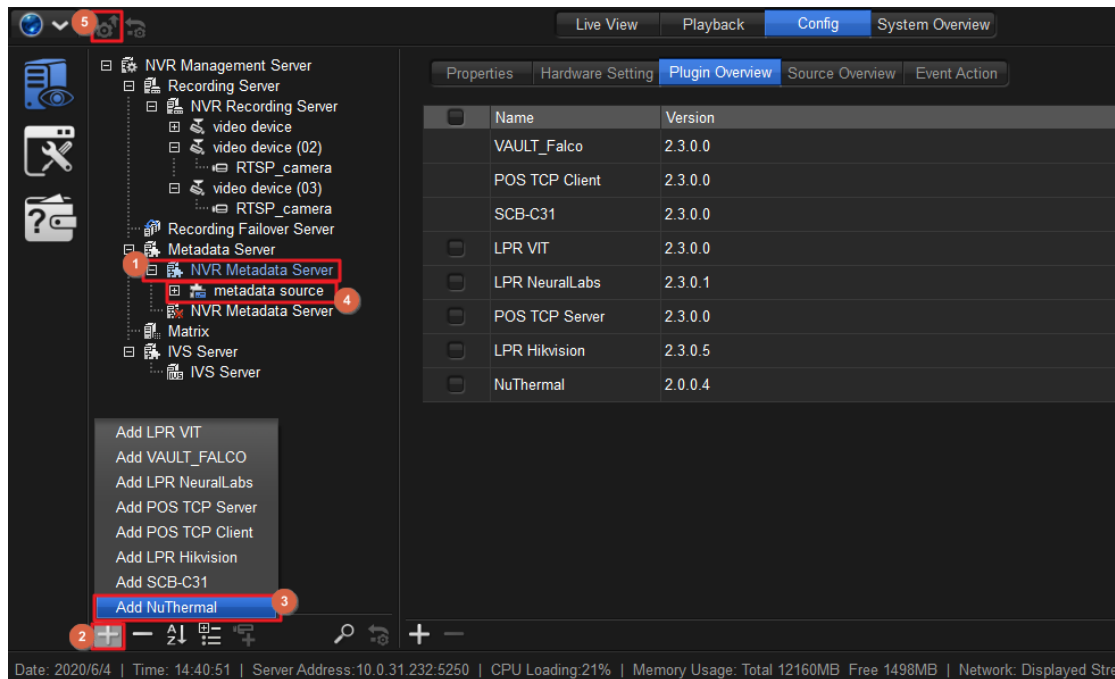
3-1 Download Thermal Metadata Plugin from NUUO website

(Link :http://d1.nuuo.com/NUUO/NUUO_Thermal_Detection/Plug_in/crystal/MetadataModelNuThermal.nmp)

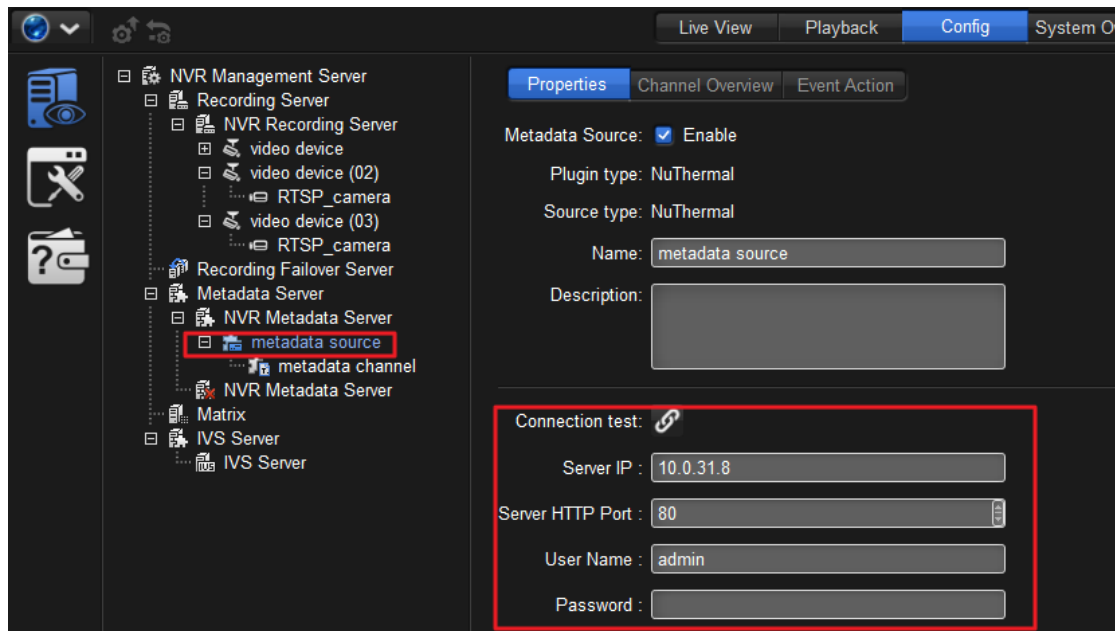
3-2 Import Thermal Metadata nmp file to NuClient



3-3 Add Metadata Source “NuThermal” to receive Thermal Metadata

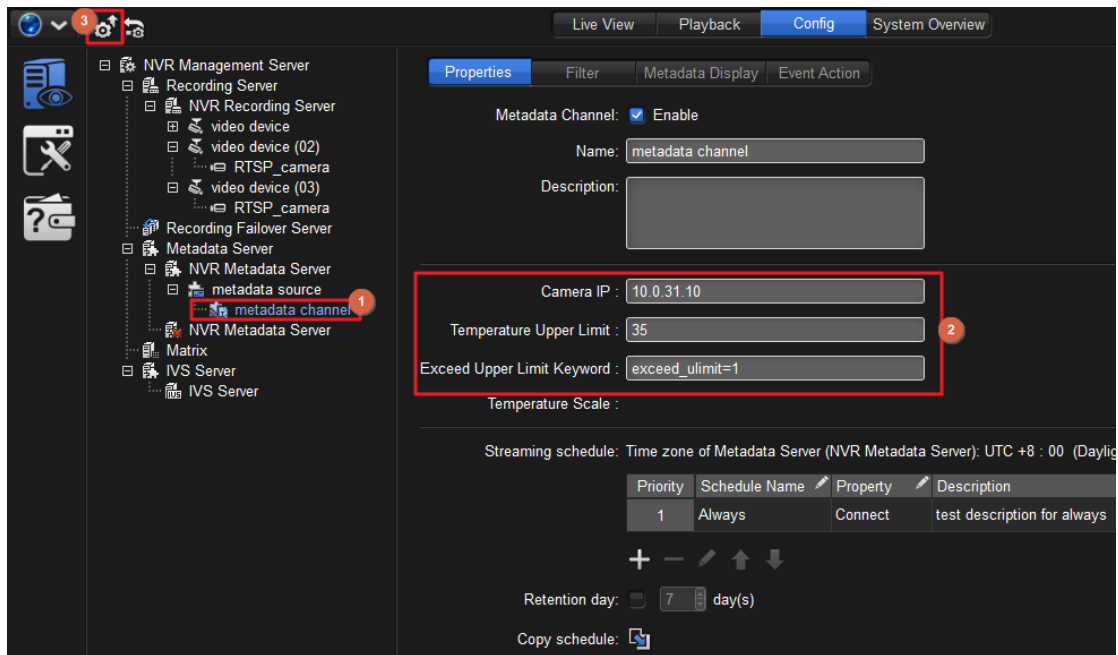


3-4 Click metadata source and fill in Connection test information



3-5 Metadata channel :

- Camera IP : IP address of thermal camera
- Temperature Upper Limit : Once the detected Temp exceed the upper limit, it will trigger alarm and show the keyword in metadata transaction.
- Exceed Upper Limit Keyword : a set of strings that will be triggered when Plugin receives Metadata specified by Temperature Upper Limit and used as event keywords.



3-6 Download Thermal Filter from NUUO website

(Link : http://d1.nuuo.com/NUUO/NUUO_Thermal_Detection/TagFilter/crystal/thermal_camera_filter.ini)

3-7 Setup Filter : After importing the thermal metadata, you will see the default filter imported in the filter section

※If you want to setup the custom filter, please double check if the Metadata show in the LiveView and Playback are both correct

Filter Configuration

Choose filter: filter (Thermal) + - 🔍

Filter name: filter (Thermal)

Encoding option: ASCII

Transaction timeout: 5 sec.

Data filter definition:

Original data:

```
<LF>ulimit=40.0<CR><LF><TRANSACTION_END><CR><LF>
<TRANSACTION_START><CR><LF>cam_ip=10.0.31.10<CR><LF>max=39.5<CR>
<LF>ulimit=40.0<CR><LF><TRANSACTION_END><CR><LF>
<TRANSACTION_START><CR><LF>cam_ip=10.0.31.10<CR><LF>max=39.6<CR>
<LF>ulimit=40.0<CR><LF><TRANSACTION_END><CR><LF>
<TRANSACTION_START><CR><LF>cam_ip=10.0.31.10<CR><LF>max=39.5<CR>
<LF>ulimit=40.0<CR><LF><TRANSACTION_END><CR><LF>
```

Filtered data:

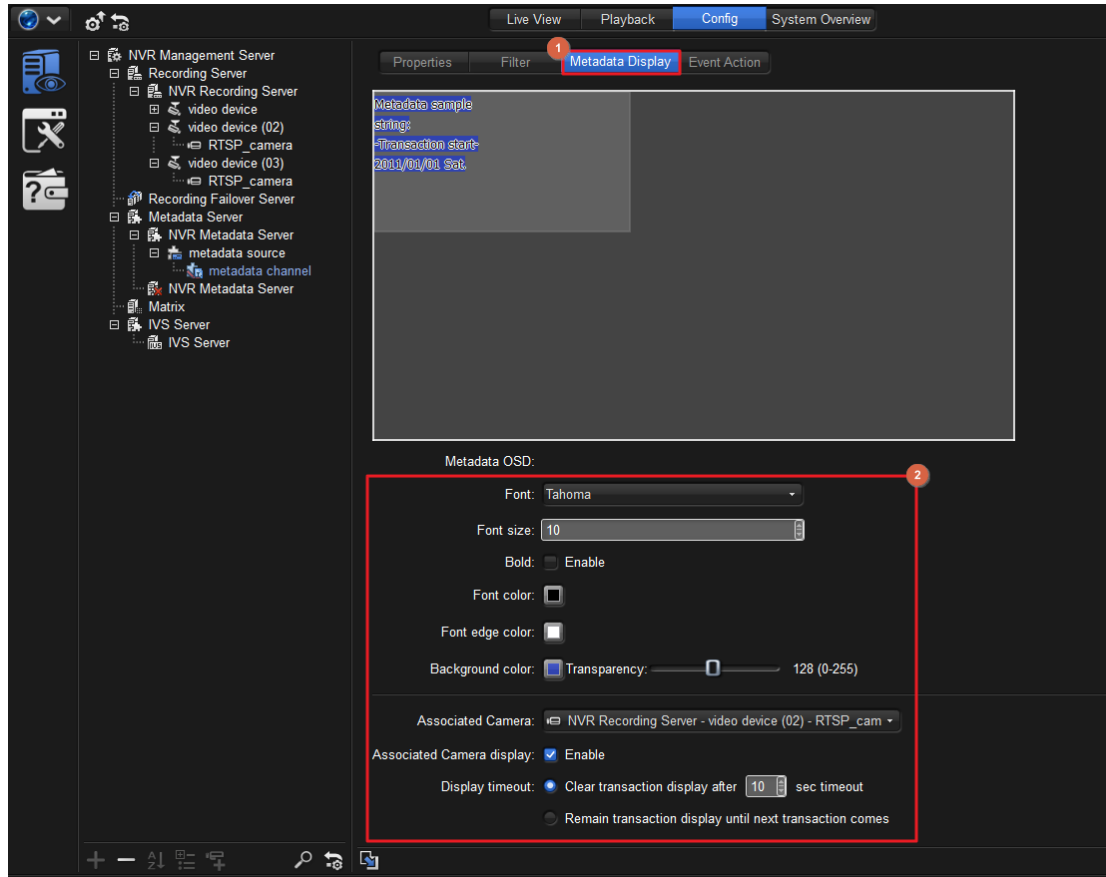
```
cam_ip=10.0.31.10
max=39.5
ulimit=40.0cam_ip=10.0.31.10
max=39.5
ulimit=40.0cam_ip=10.0.31.10
max=39.6
ulimit=40.0cam_ip=10.0.31.10
max=39.5
ulimit=40.0
```

Filter configuration:

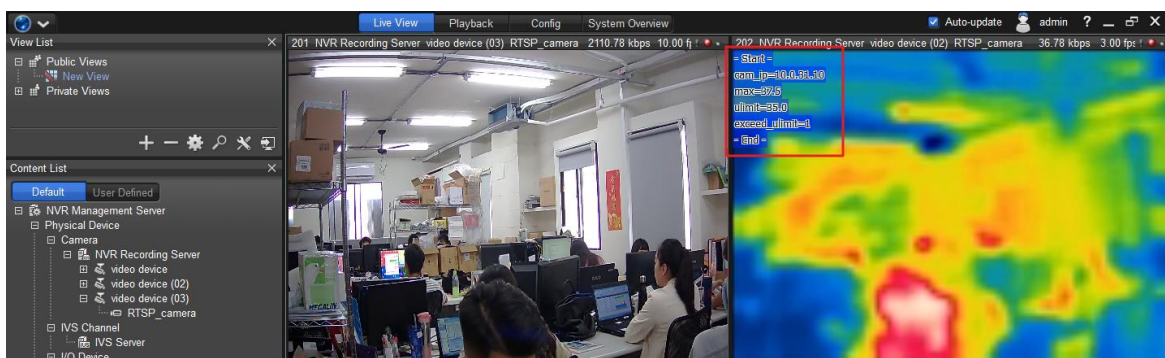
Priority	Action type	Match option	Data	Result
1	End	Plain text	<CR><LF><TRANSACTION_END><CR><LF>	
2	Omit	Plain text	<TRANSACTION_START><CR><LF>	(Omit)
3	Omit	Plain text	<TRANSACTION_END><CR><LF>	(Omit)

Date: 2020/6/17 | Time: 15:09:59 | Server Address: 10.0.31.213.5250 | CPU Loading: 41% | Memory Usage: Total 16320MB Free 1400MB | Network: Displayed Streaming Bit Rate 0.00 kbps

3-7 Adjust the Metadata Front, Front Size and Associated Camera which will show the Metadata

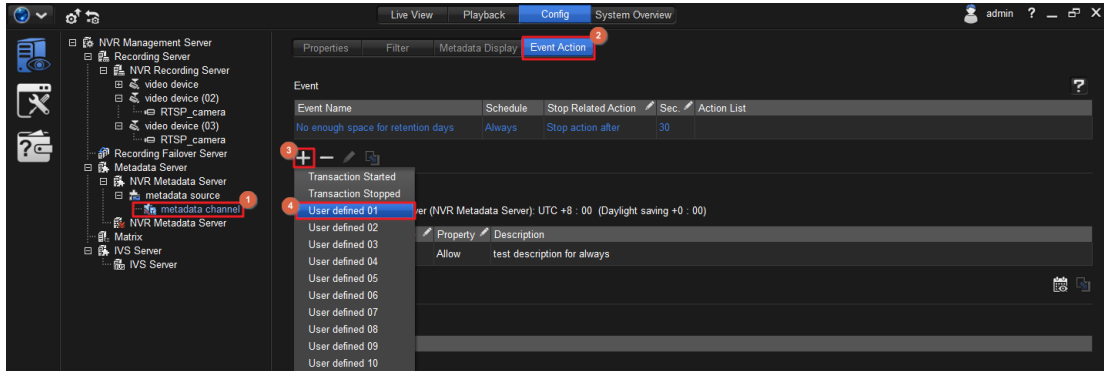


3-8 You will see the Metadata attach on the assigned camera

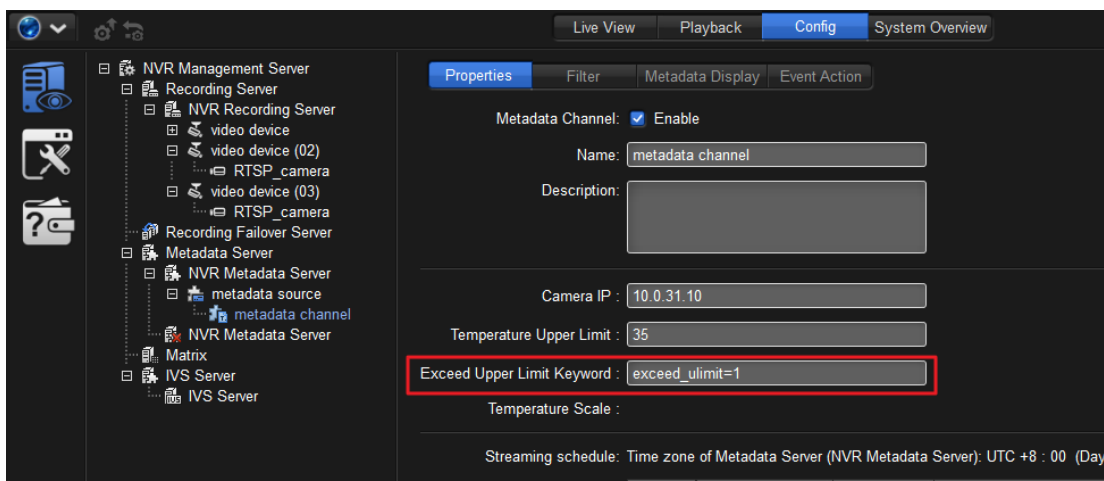


4. Setup event and related action

4-1 In the Event Action section to add custom event and action

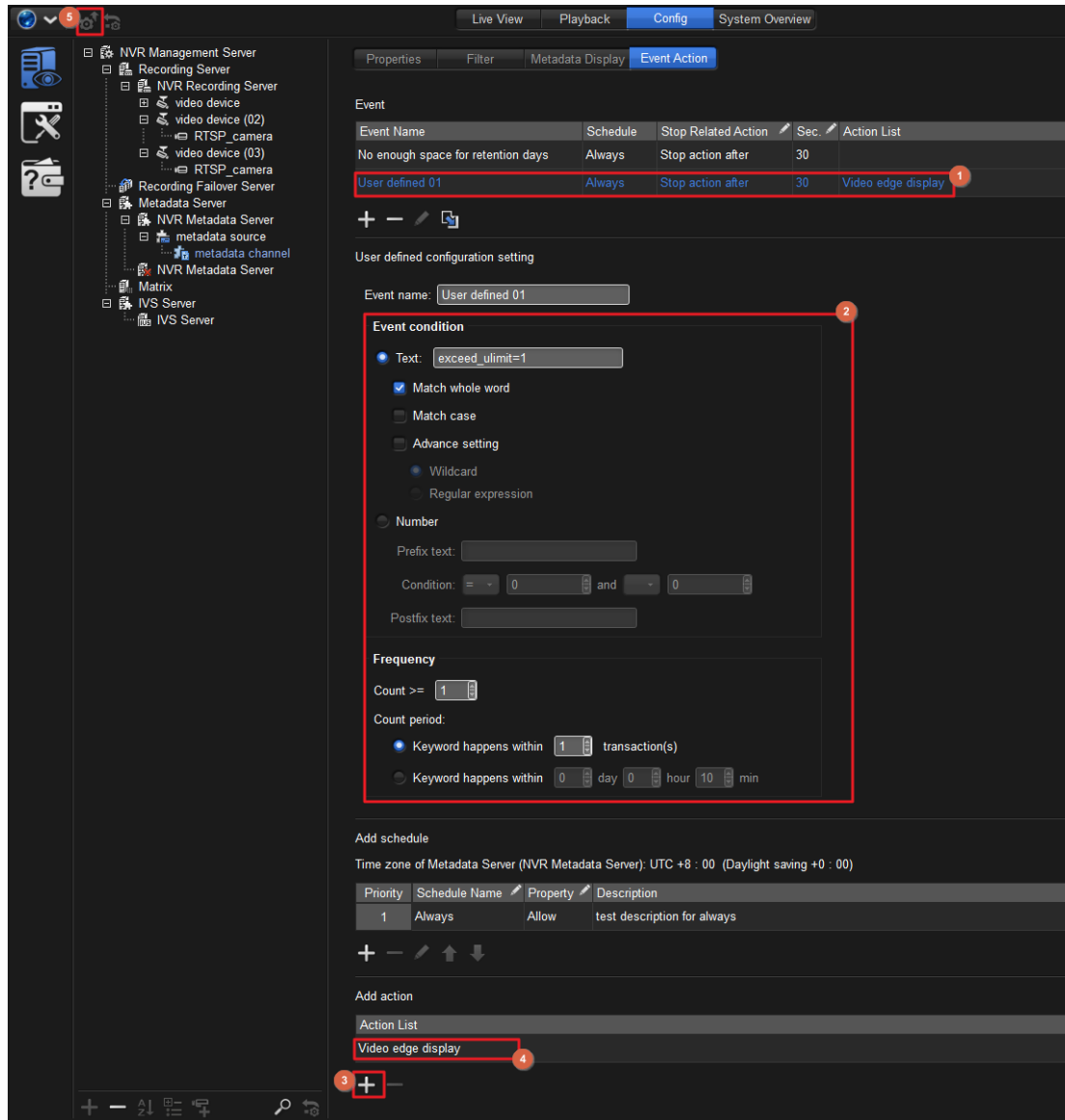


4-2 Copy Exceed Upper Limit Keyword in the properties section



4-3 Paste to Text which is under User defined configuration setting

The example here is “exceed_ulimit=1”



4-4 After setting the event, you will see the action show in the LiveView once the alarm is triggered

