



# IPTV MULTI VIEWER USER MANUAL

2015/05 v2.0



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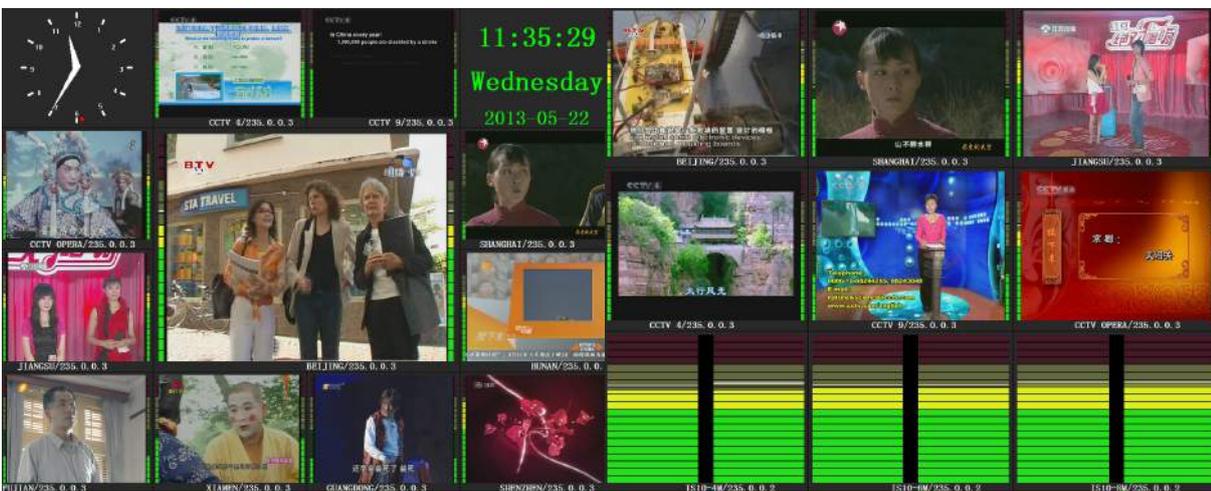
# Chapter I Overview

## 1.1 System introduction

ANTIK MultiViewer can receive TServerIP stream via Ethernet adapter in real time, then decode and display them. It can also monitor audio and video alarms, display monitoring results on monitoring wall.

## 1.2 Screenshots of Monitoring Wall

Commercial Version:



DEMO version with watermark:



## Chapter II Running Environment

ANTIK could provide full package including hardware and software license. MVS-200D is model of Multiviewer server, which handle multiple services with customized license. Also customer could build their own system to meet BOM configuration as below.

### 2.1 MVS-200D Hardware & License Package

Model	Description
HawkEye DG MVS-200	2RU Industrial Chassis; CPU: Intel Xeon E5-2420 *2 RAM: 12GB DDR3 1333MHz GigaE NIC port x2 HDMI output x2 redundant power supply
BMV-16	Support 16 CH Service decoding license
BMV-32	Support 32 CH Service decoding license
BMV-48	Support 48 CH Service decoding license
BMV-64	Support 64 CH Service decoding license
BMV-80	Support 80 CH Service decoding license
BMV-96	Support 96 CH Service decoding license
BMV-112	Support 112 CH Service decoding license
BMV-128	Support 128 CH Service decoding license
BMV-ULT	Support unlimited Service decoding license

\* Order would be delivered with Software plus USB Key;

\*No limitation of SD or HD service counting;

\*License might be customized according to request;

\*Hardware might be changed without notice.

### 2.2 Benchmark

MVS-200D				
Service Type	MPEG2 SD	MPEG2 HD	H.264/AVC SD	H.264/AVC HD
Max. amount	100CH	30CH	50CH	12CH

## 2.3 BOM for Multiviewer Hardware

Source	HW Configuration	OS & Database
<30CH	CPU: 1.4GHz or advanced Memory: 2GB or more HDD: 30GB or more Graphic Card: support DirectX 9.0c or advanced	-Microsoft Windows 7 Ultimate 32bit/64bit -Microsoft Windows Server 2008 R2(64bit) -MySQL (Alarm log record)
31~80CH	CPU: Intel Xeon E5-2420 Memory: 6GB DDR3 1333MHz HDD: 1TB Graphic Card: NVIDIA GeForce GT210 GDDR3 1GB 64bit	-Microsoft Windows 7 Ultimate 32bit/64bit -Microsoft Windows Server 2008 R2(64bit) -MySQL (Alarm log record)
81~160CH	CPU: Dual Intel Xeon E5-2630 @2.3GHz HDD: 1TB Memory: 12GB DDR3 GraphicCard: Gigabyte GV-N210SL-1GI (GeForce GT210 1GB/64bit)	-Microsoft Windows 7 Ultimate 32bit/64bit -Microsoft Windows Server 2008 R2(64bit) -MySQL (Alarm log record)

Source counted as:

- MPEG-2 SD 3.5Mbps 720\*576
- MPEG-2 HD 18Mbps 1920\*1280
- H.264 HD 8Mbps 1920\*1280

## Chapter III Installation Instruction

### 3.1 Installation of MySQL Database

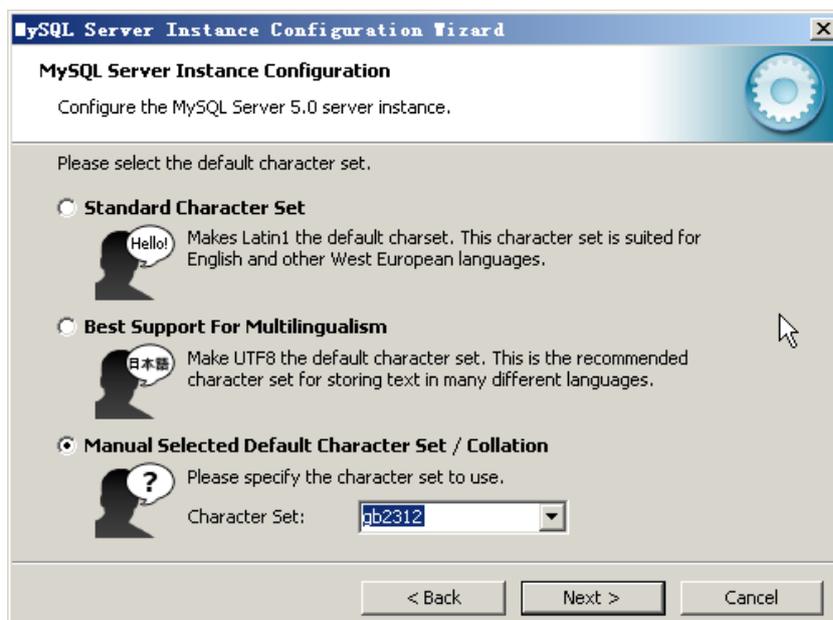
Please purchase MySQL directly for any commercial use.

Notices for installation of MySQL database:

**Step-1:** Select third item **【Skip Sign-Up】** from the following figure:



**Step-2:** Select third item **【Manual Selected...】** from the following figure and select “gb2312” from “Character Set”.



**Step-3:** Enter “root” **【New root password】** in the following figure, enter “root” after the below “Confirm”

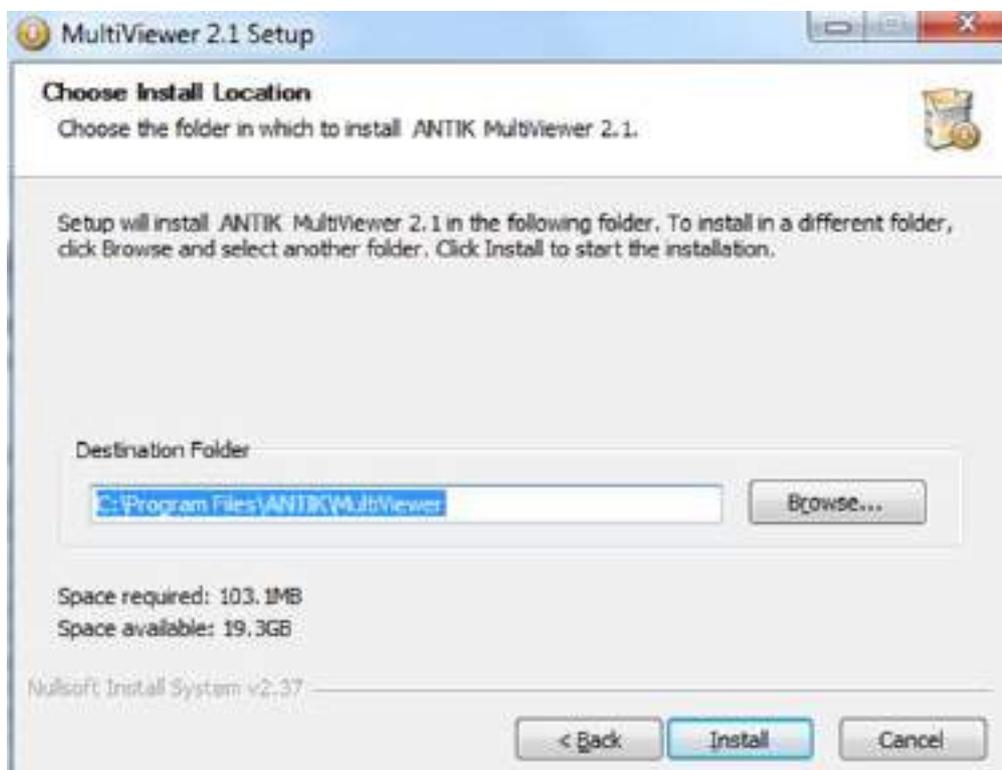
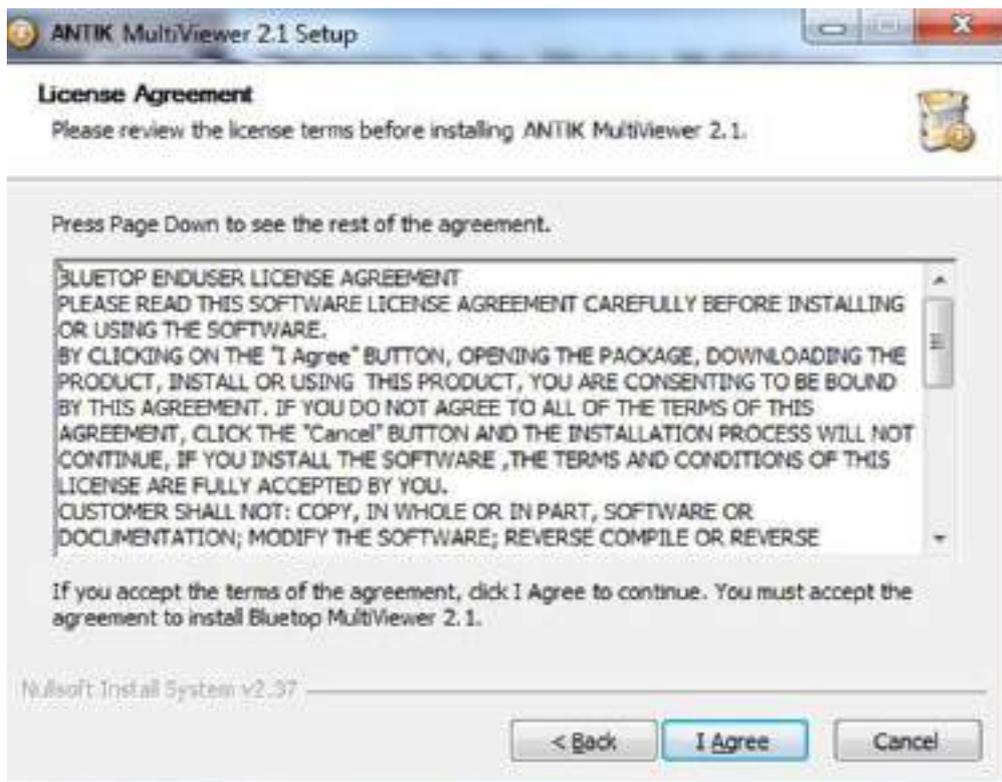
and check the below “Enable root access from remote machines”



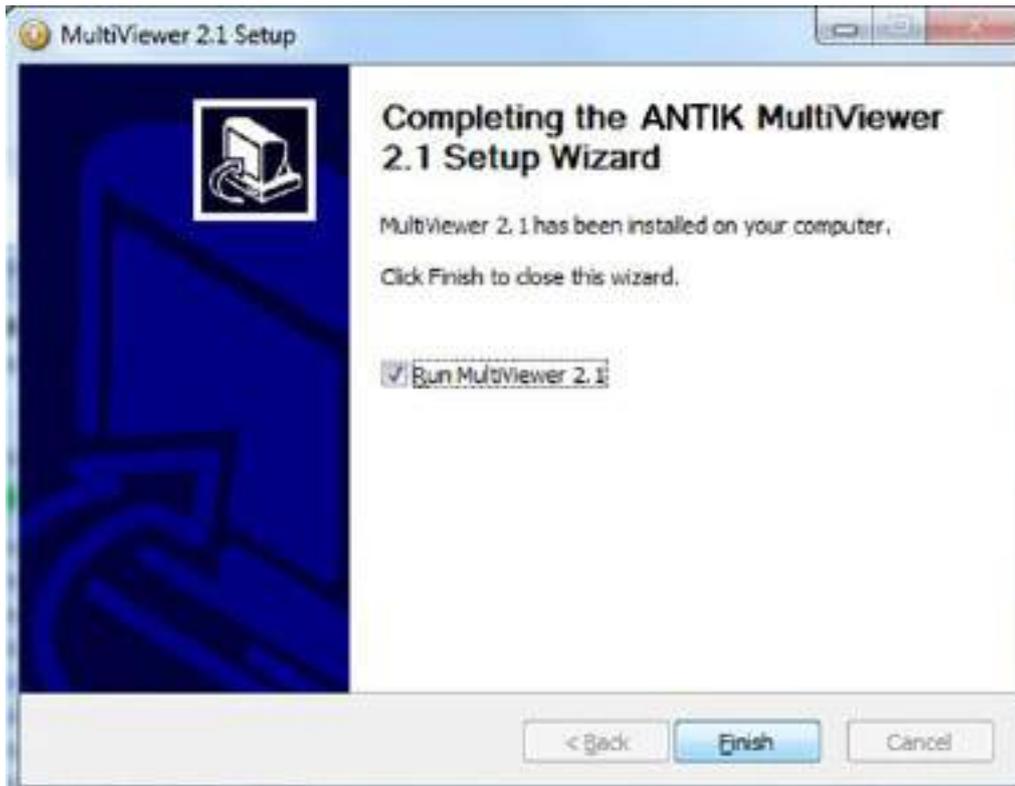
### 3.2 Installation of ANTIK MultiViewer Software

To double click **MultiViewer\_Setup\_VX.X.X\_x64.exe** and click step by step:





Click finish to run multiviewer software.



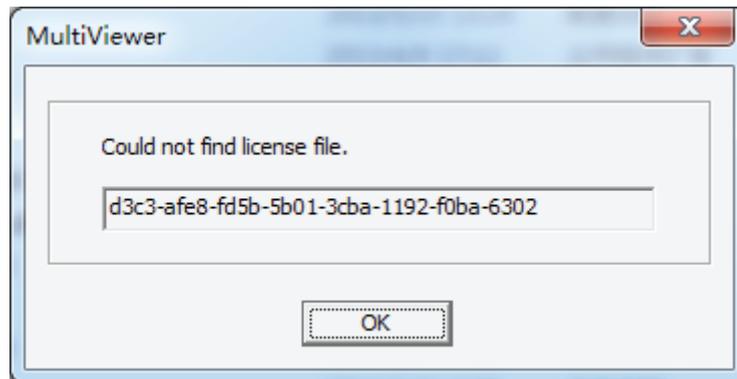
Tick the right networks and click Allow access to continue.



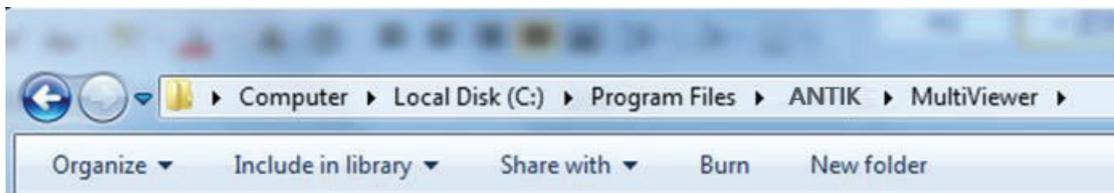
A shortcut would be display on your desktop automatically.



Double click and run ANTIK MultiViewer Software for the first time, the following dialog pops up.

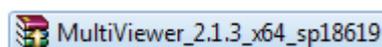


Please send back the contents in the red box for license activation to [info@antiktech.com](mailto:info@antiktech.com) or your supplier, we will provide software authorization file. After receiving the software authorization file 'license.lic', please copy this file to the MultiViewer\_Setup\_VX.X.X\_x64.exe folder and double click shortcut icon to run the software.



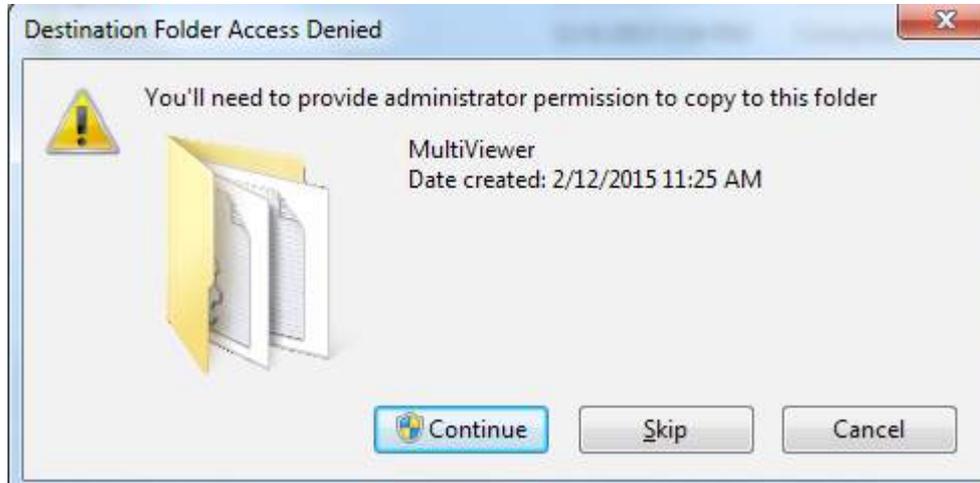
### 3.3 Installation of SP

If the software shipped along with SP (software pack), please copy the SP file into your installation folder and double click and run before use Multiviewer.

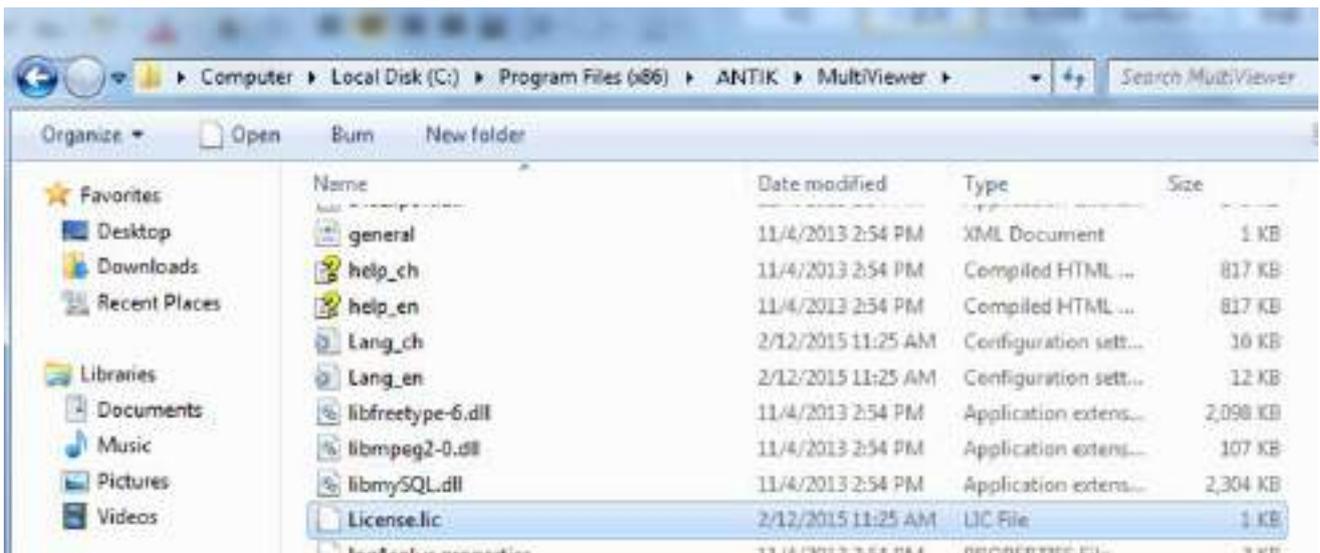


### 3.4 Installation of DEMO

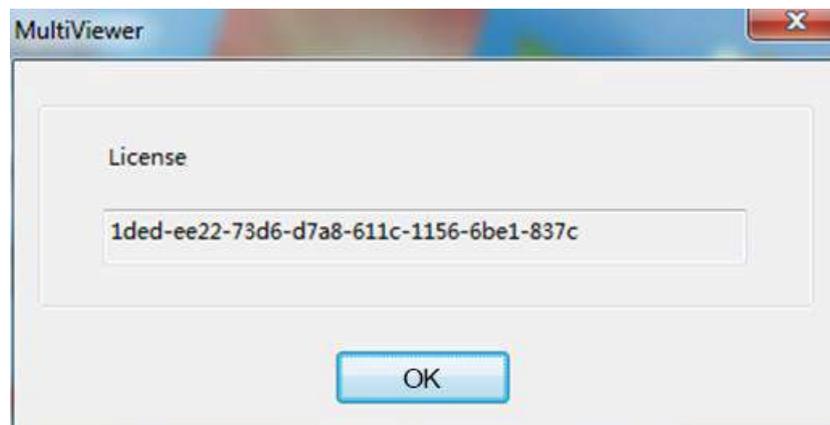
ANTIK provides DEMO version for better customer experience and trial test. Please ask for demo version and install steps as same as commercial version. The only difference is the watermark and limitation of trial period (max. 30CH) and amount of service (max. 30CH)



Click Continue and copy License.lic to installation path:

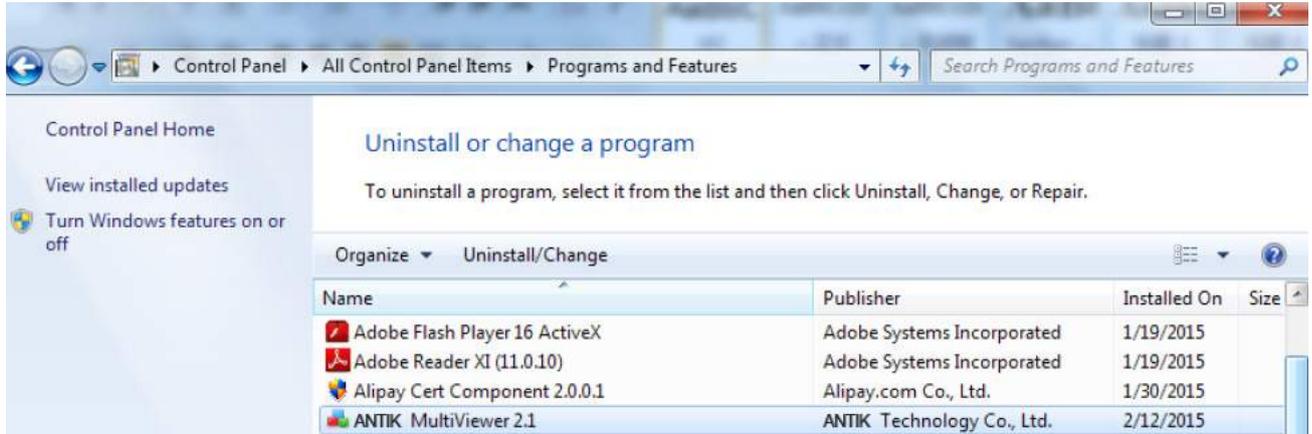


Double Click the shortcut on desktop to run Multiviewer



### 3.5 Un-installation of Multiviewer

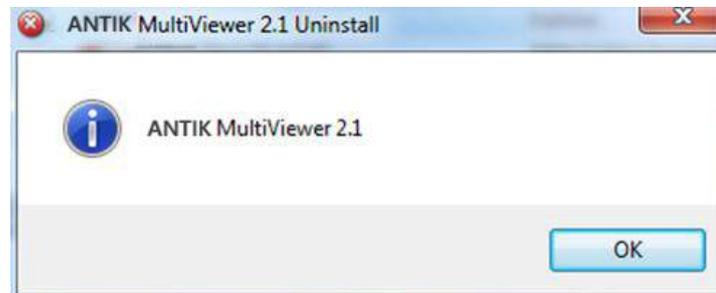
Control Panel----Programs and Features-----ANTIK Multiviewer 2.1.x.x



Click Uninstall



Click **Yes** to continue



Click OK and remove successfully

# Chapter IV Operation Instruction

## 4.1 Main User Interface

The main interface of the ANTIK MultiViewer Software includes tool bar, channel information, playing window and system information. The software main interface is shown as the figure 4-1:

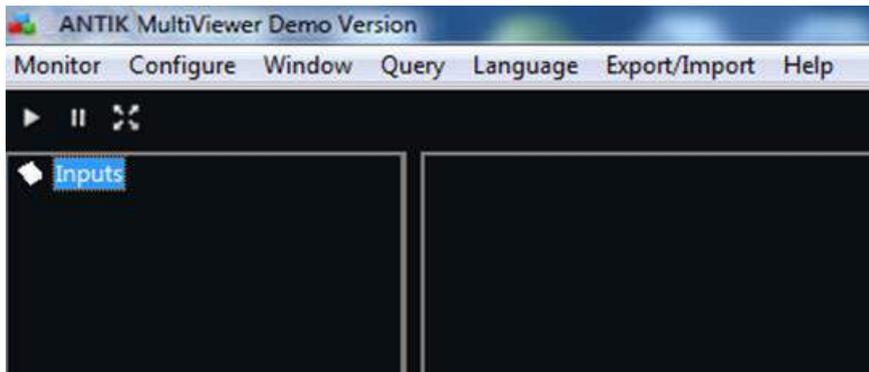
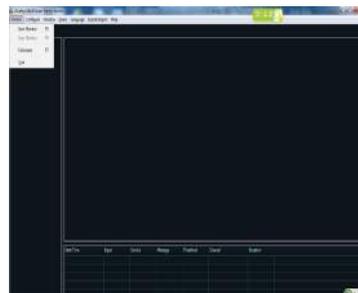
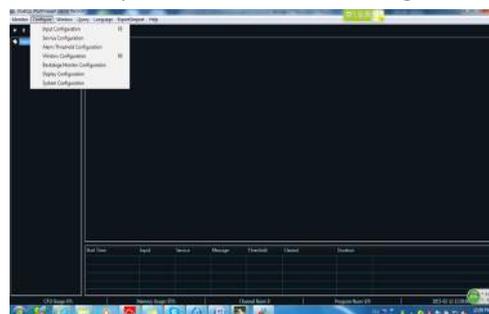


Figure 4-1

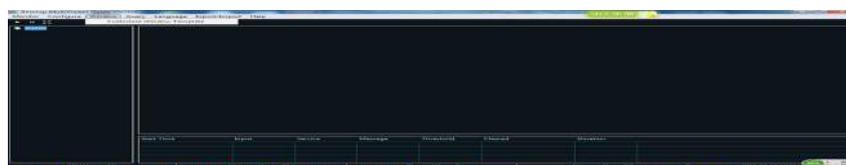
- ① Monitor: This button is to start monitor after configuration



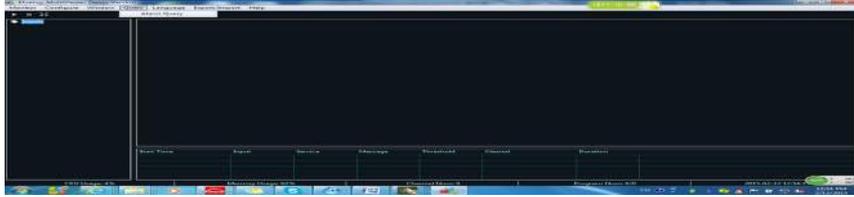
- ② Configure: This button is most important function to configure the stream source



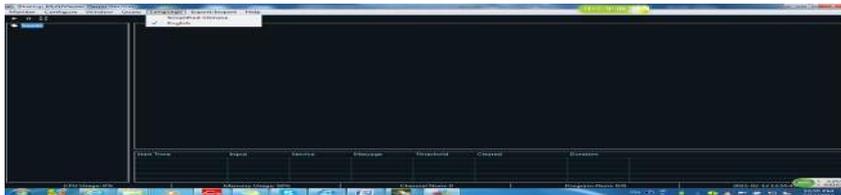
- ③ Window: This button is to start window(screen) layout, where provide template and customization



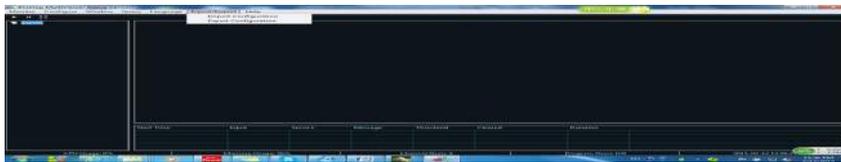
- ④ Query: This button is to query alarm history



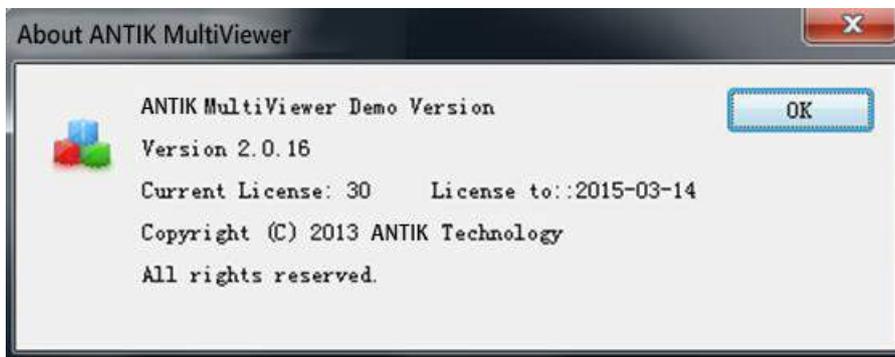
- ⑤ Language: Multiviewer provide English and Chinese switch



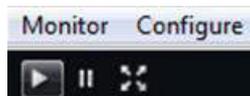
- ⑥ Export/Import: Save and load the configuration history



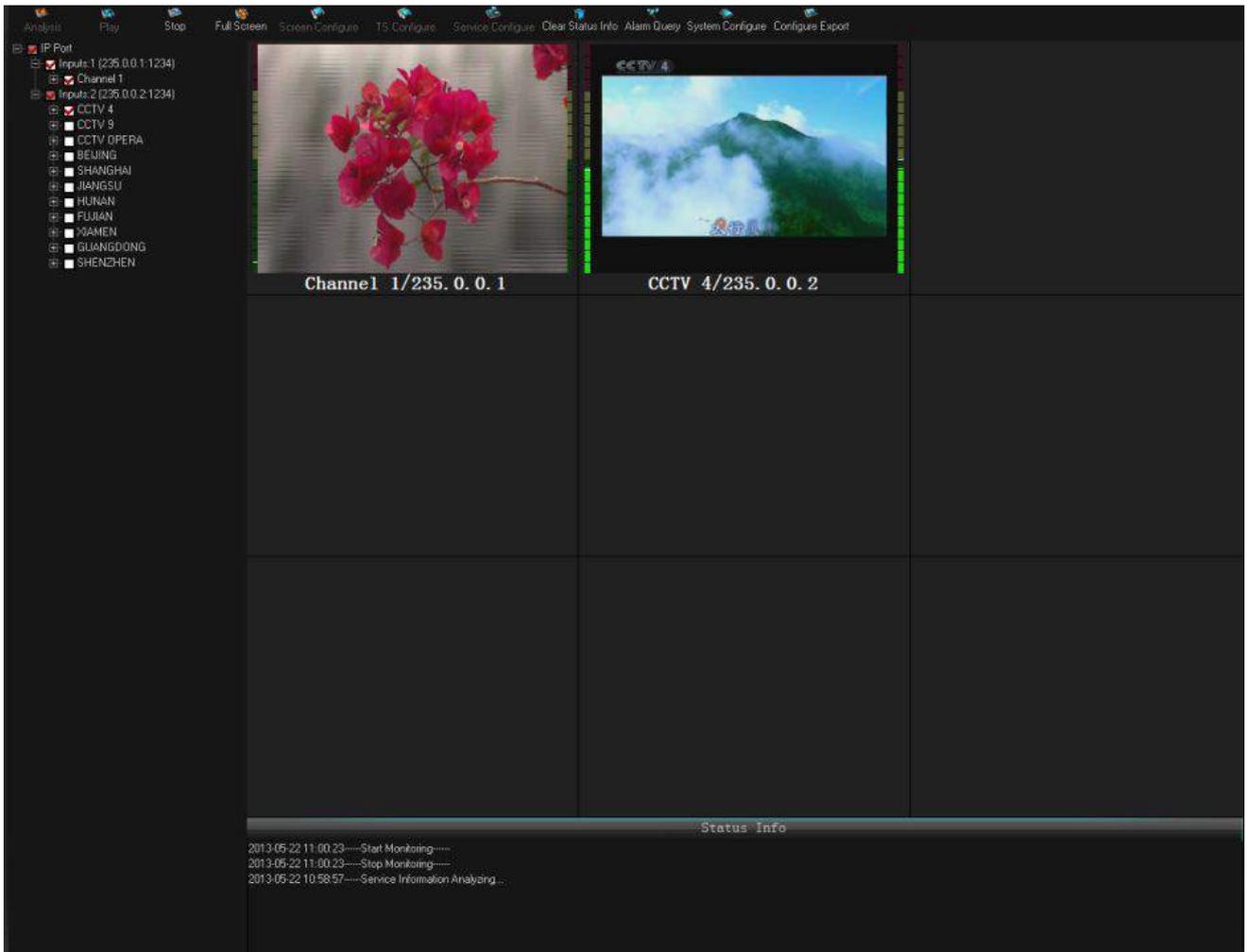
- ⑦ Help: User Manual and software version information



## 4.2 Tools bar (play, pause, full screen)



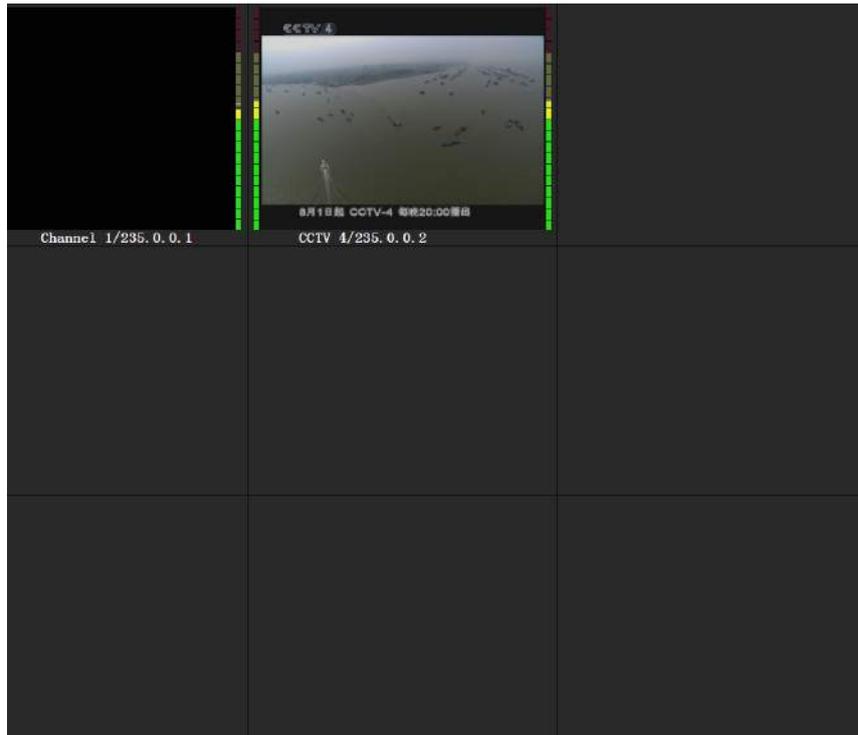
Click button, the play window will display the program image and monitoring starts, shown as below. To double click the program image in playing, this program will zoom out to the full playing window. To double click it again, the image will restore to the original size. To click the program image in playing, you can play accompanied sound of this program.



**【Pause】** : To click button, the software will not decode the program and pause monitoring.



**【Full Screen】** To click , the playing window will zoom out to the full screen. Double click the window will restore to original size, shown as below:



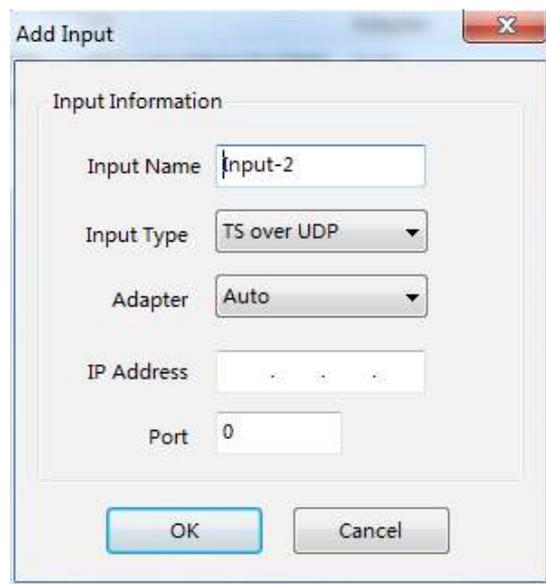
Double click program image under full screen state, the program will display on the full screen.

## 4.3 Configure

Launching the ANTIK MultiViewer, user needs to configure and run monitoring via the following steps and instructions of each functional tab.

### 4.3.1 Input Configuration

Click **Configure**, setup input sourcing step by step and then click **Analyse All**, the software will decode and all feeding streams.

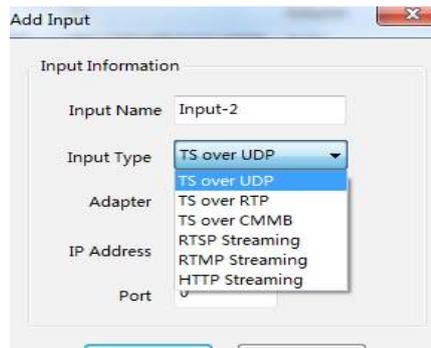


\*Note:

**IP addresses and port number: enter the IP address and port number of code stream. The multicast addresses range from 224.0.0.0 to 239.255.255.255**

**Step-1:** Input signal name, user can input a text to mark or name the stream. The default is Input-x and user can customize signal name.

**Step-2:** Input type, user can select the type of feeding streams from TSoverUDP, TSoverRTP, TSoverCMMB, RTSP streaming, RTMP streaming, Http Streaming.

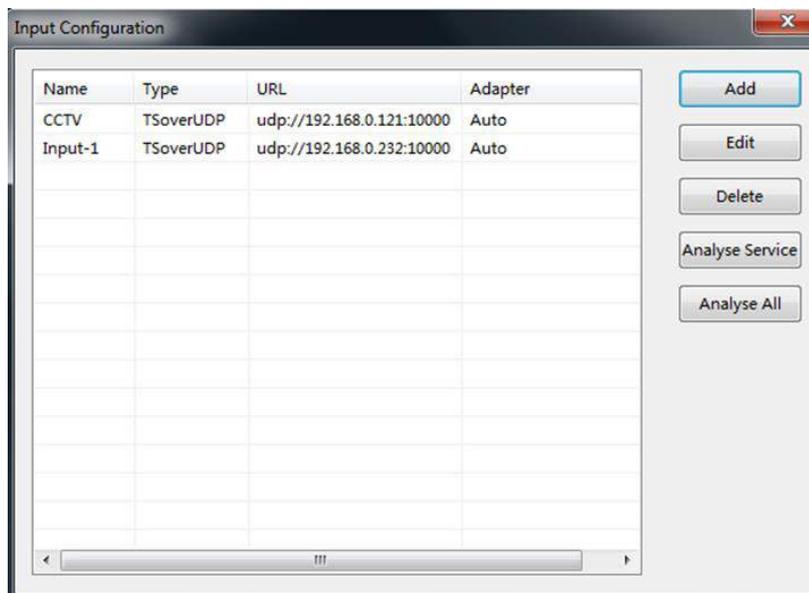


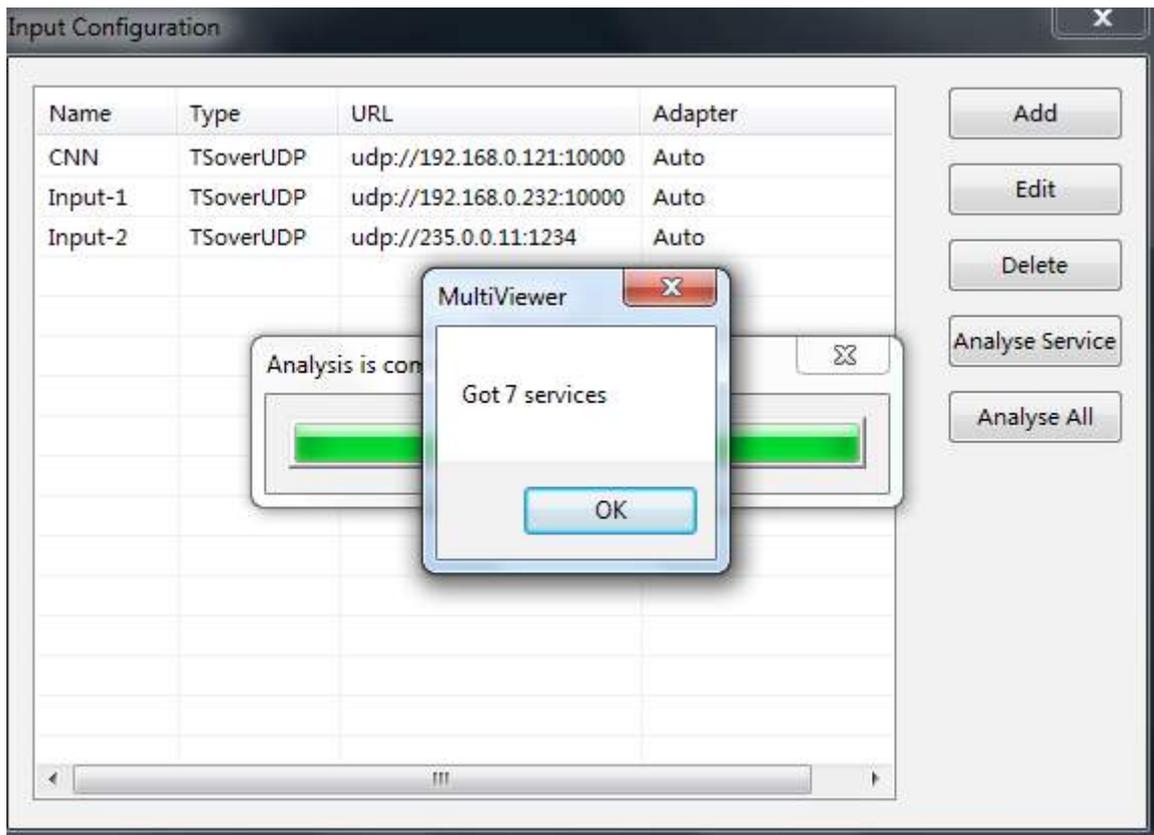
**Step-3:** Select the right NIC as Adapter:

Allocate network adapter: when two Ethernet interfaces are available, you can receive data by using two Ethernet interfaces.

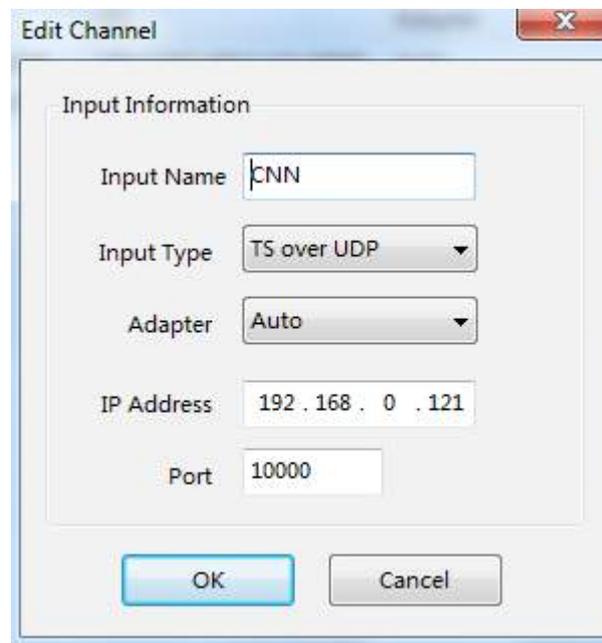


**Step-4:** Analyse service:select one service to click Analyse Service, or select All to Analyze all input services. Waiting for the process bar and a pop-up window will indicate how many service approached.





**Step-5:** Click Edit button to modify the selected service information and click OK.





### 4.3.3 Alarm Threshold Configuration

This option is for Alarm type selection or enabling also duration time setting:

**Service lost:** if the feeding streaming receiving rate keeps zero for 3s, it will generate signal break alarm. When the signals break, no alarms are generated.

**Video lost:** when the code rate of the service video PID keeps zero for a period (namely user-set “alarm time” parameter) in the network code stream receiving, it will generate video loss warning. When a video is lost, the system will not generate static frame, black image, color stripe and decoding failure alarm.

**Audio lost:** when the code rate of the service audio PID keeps zero for a period (namely user-set “alarm time” parameter) in the network code stream receiving, it will generate audio loss warning. When an audio is lost, the system will not generate high volume, low volume and decoding failure alarm.

**Freeze:** when the program video image keeps static for a period (namely user-set “alarm time” parameter), it will generate the freeze alarm.

**Black:** when the program video image keeps black for a period (namely user-set “alarm time” parameter), it will generate the black image alarm.

**Color bar:** when the program video image keeps color stripe for a period (namely user-set “alarm time” parameter), it will generate the color stripe alarm.

**Audio High:** when the program volume keeps higher than a threshold for a period (namely user-set

“alarm time” parameter), it will generate the high volume alarm.

**Audio Low:** when the program volume keeps lower than a threshold for a period (namely user-set “alarm time” parameter), it will generate the low volume alarm.

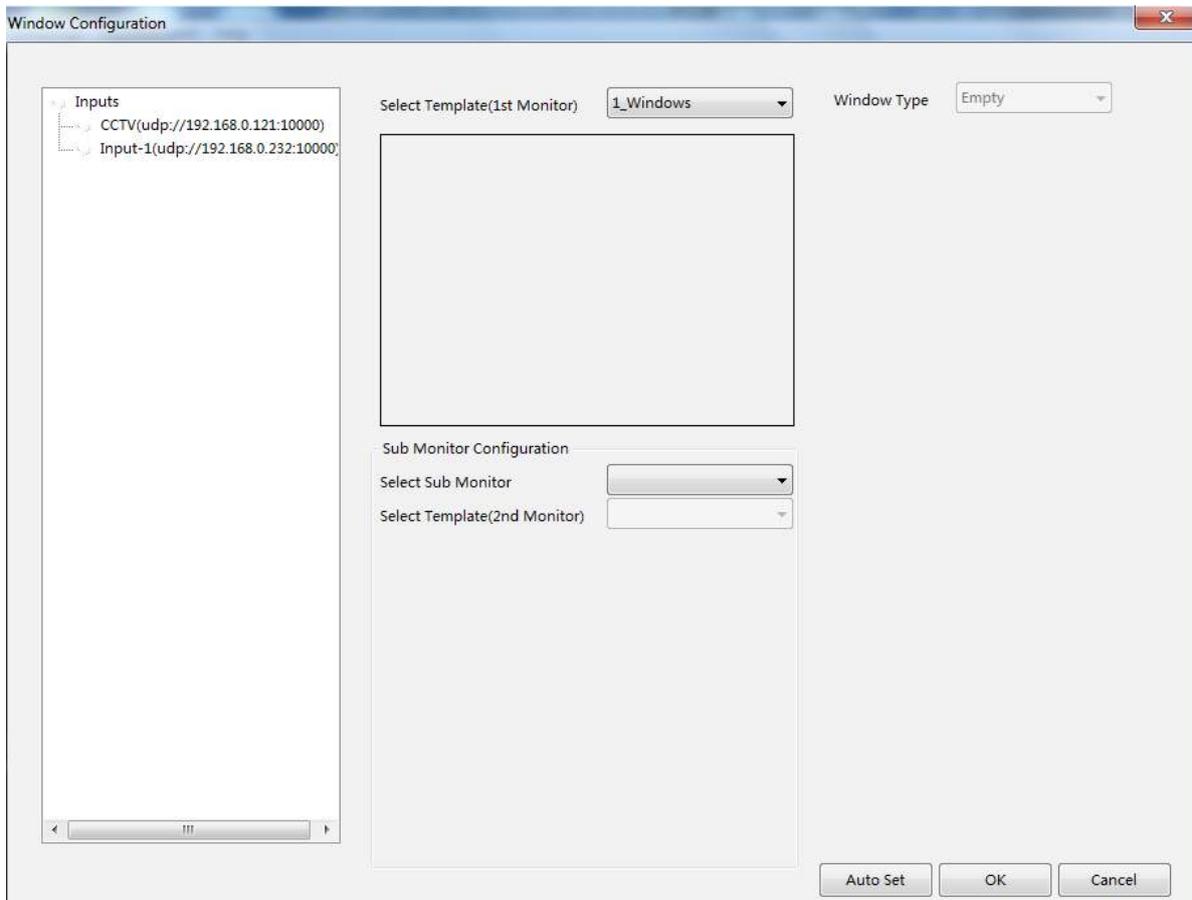
**Decode fail:** when the video keeps for 10s or the audio decoder cannot decode the input data, it will generate decoding failure alarm. When the input code stream is the scrambled stream or includes incorrect format, it will generate decoding failure alarm.

**Video Scrambled:** when feeding stream are encrypted, the ANTIK Multiviewer software couldn't decode.

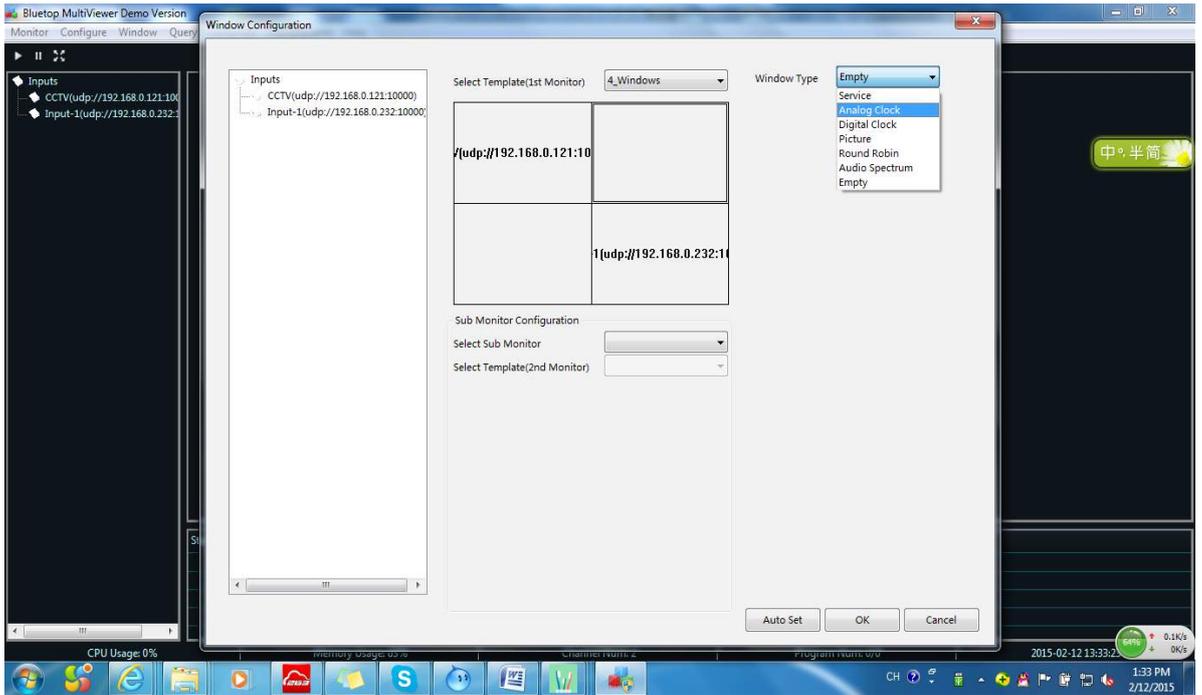
**Audio Scrambled:** when feeding stream are encrypted, the ANTIK Multiviewer software couldn't decode.

#### 4.3.4 Window Configuration

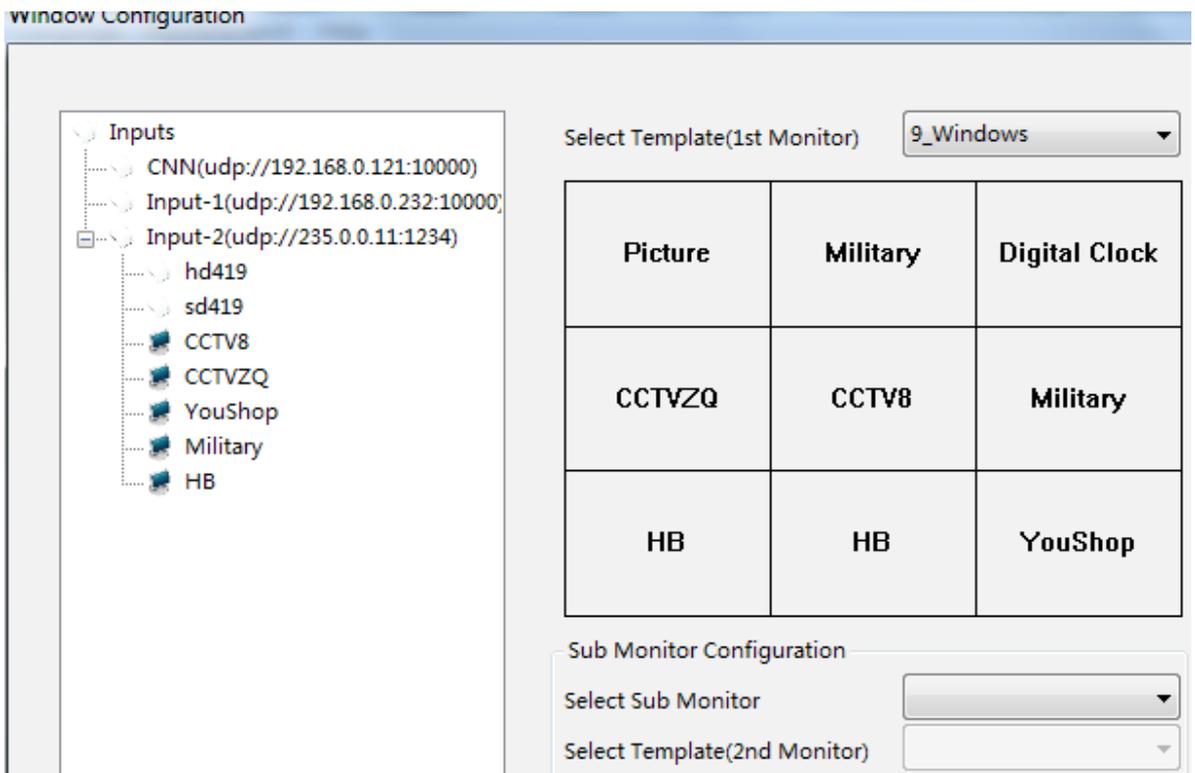
A user can set main screen and save screen image division mode. Besides common audio and video program, the ANTIK MultiViewer Software can display analog clock, digital clock, static image and self-defined text. The fixed templates include single image, two images, four images, nine images, twelve images, thirteen images, sixteen images, twenty images, twenty five images, thirty six images. To select a template from the right drop-down of the “Select main screen template”, the following window will display schematic diagram of this template.



Drag the input service directly into rectangular, or select service type to set



Also support real-time digital or analog clock to window by selecting the digital or analog clock type.

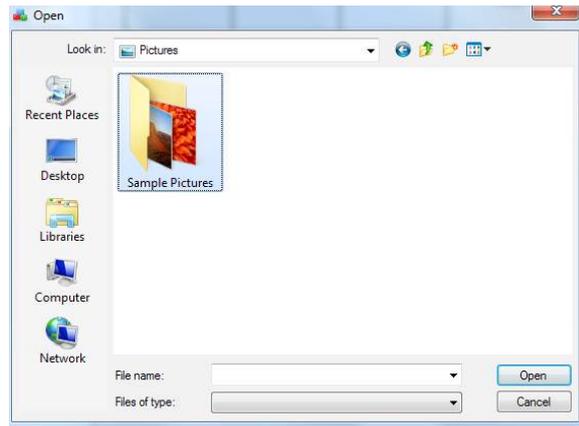


Also support picture shown in window by selecting picture type (bmp, jpg, jpeg, gif and png image)

Window Type

Select Picture

PIC\_PATH



Round Robin option is also available by selecting service and set threshold between 5 to 3600secs

hd419  
CCTV8  
CCTVZQ  
HB

>>  
<<

sd419  
Military  
YouShop

Cycle Time(5-3600s)  
 s

<b>Picture</b>	<b>Military</b>	<b>Digital Clock</b>
<b>CCTVZQ</b>	<b>CCTV8</b>	<b>Military</b>
<b>HB</b>	<b>HB</b>	<b>Round Robin</b>

Split the decoding images into two different monitors by selecting or dragging services into main monitor and sub monitor (it only enable when server connect with two monitors)

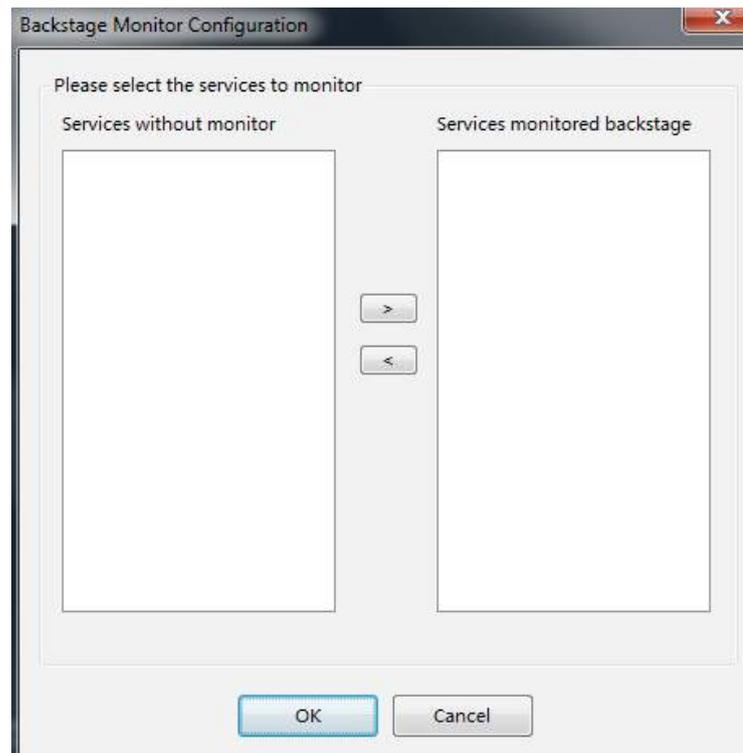
**Sub Monitor Configuration**

Select Sub Monitor

Select Template(2nd Monitor)

#### 4.3.5 Backstage Monitor Configuration

This option enabled for some service which are not needed to be decoded on window monitor.

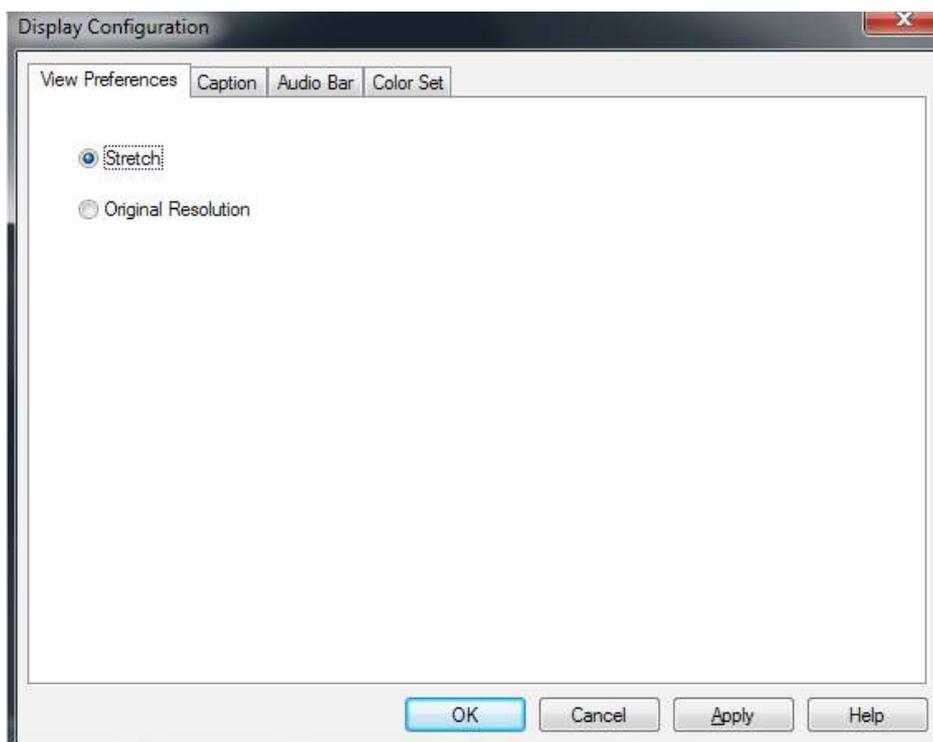


#### 4.3.6 Display Configuration

**View Preference Tab:**

There are two options: Stretch and original resolution,

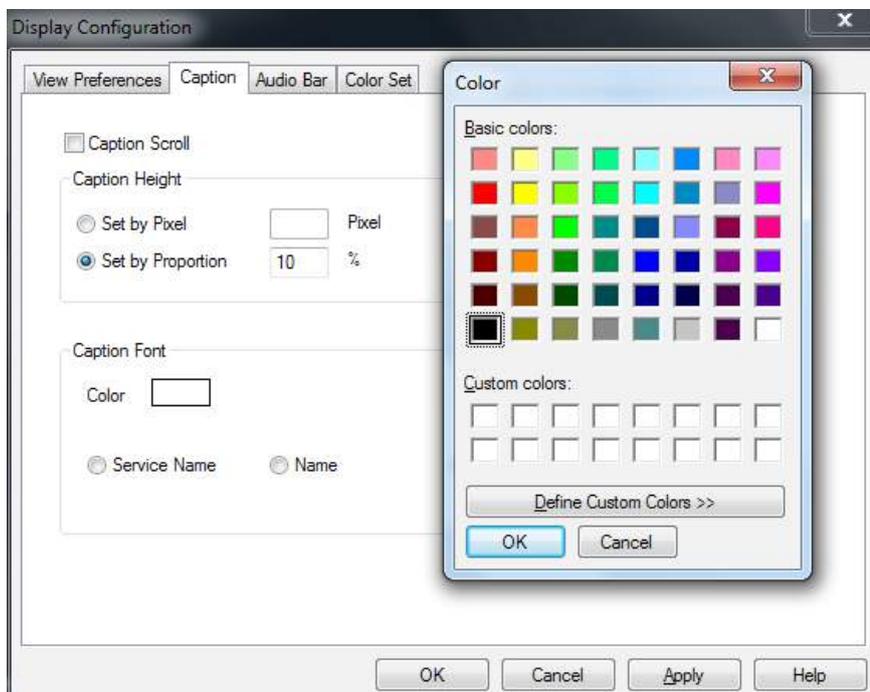
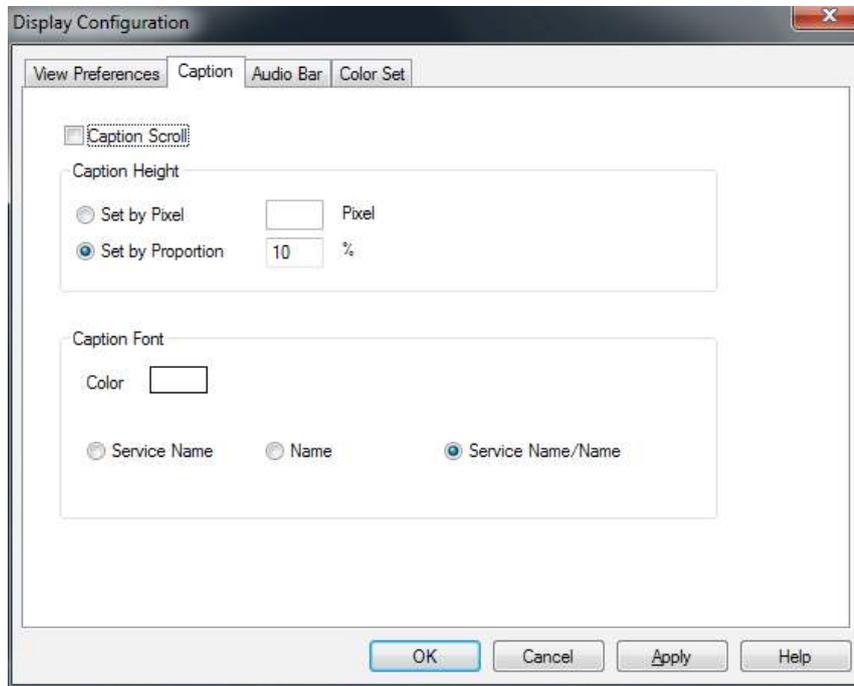
- stretch service to fit 16:9
- Original resolution: use service original resolution, if 4:3 would have black aspect border color, and set **edge color** in color set tab



**Caption Tab:**

Set service name display color, style, font as preference

- Caption scroll: the service name text would scroll when tick this box;
- Caption height: set the height by pixel or proportion;
- Caption font: set the color of service name or just name;

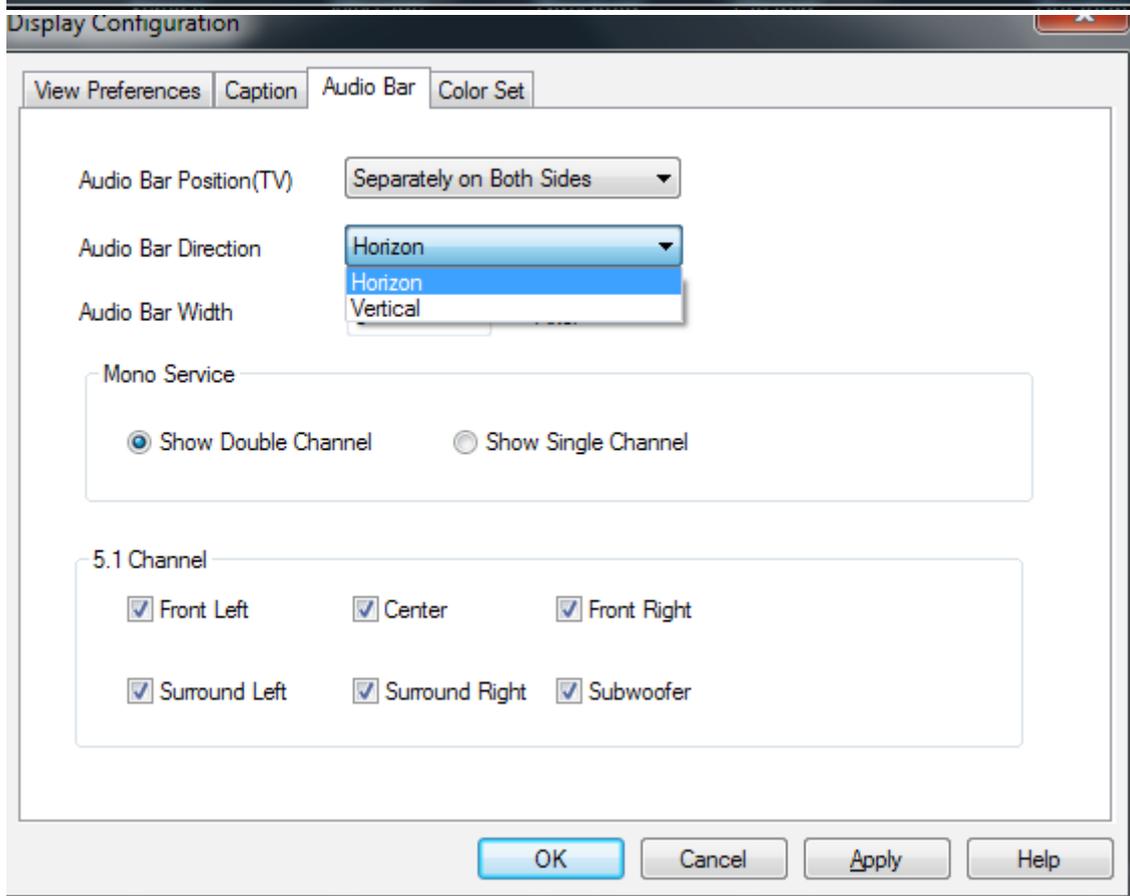
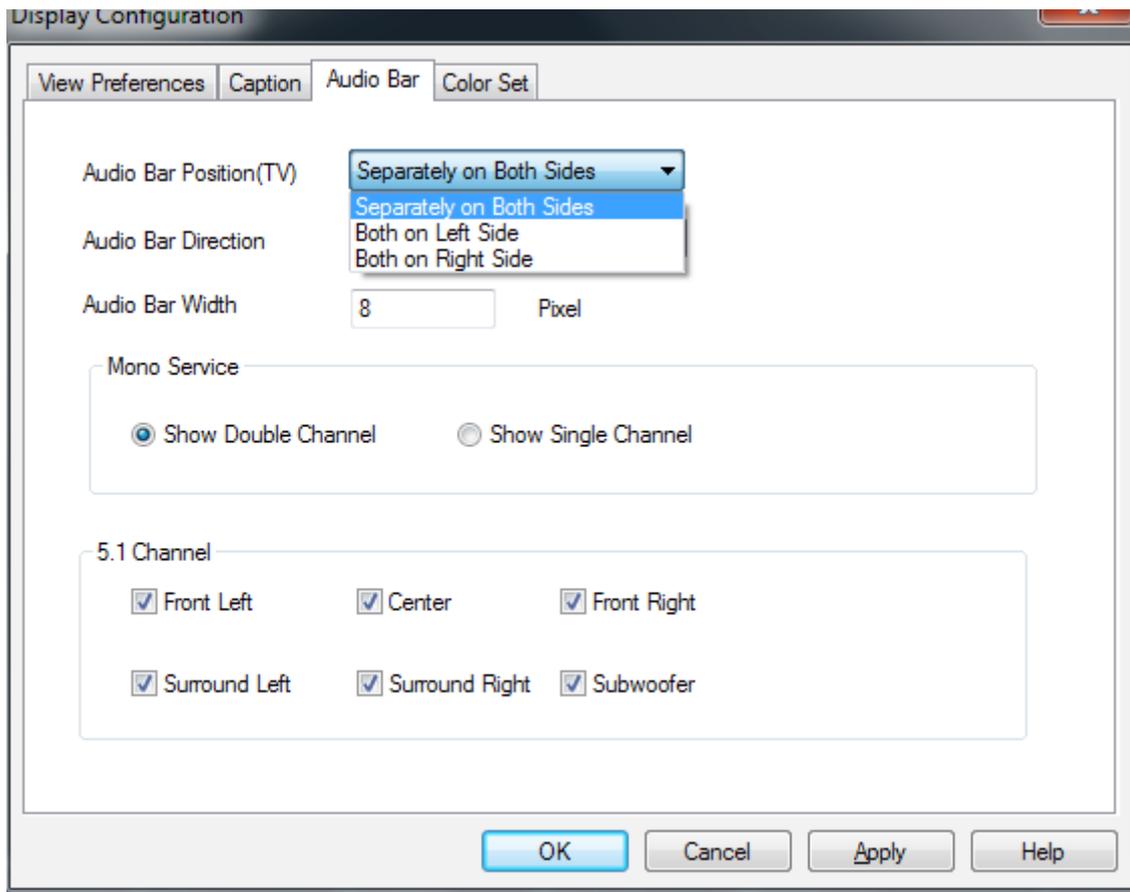


**Audio Bar Tab**

This tab provide options for audio bar and 5.1 Dobby setting:

- Audio bar position: set audiobar to bothside, or both on left side,both on right side
- Audio bar direction: set audiobar to horizon or vertical
- Audio bar width: default as 8 pixel, also set 0 to hide
- Mono Service: some service contain two audio PIDs, set decode type by ticking

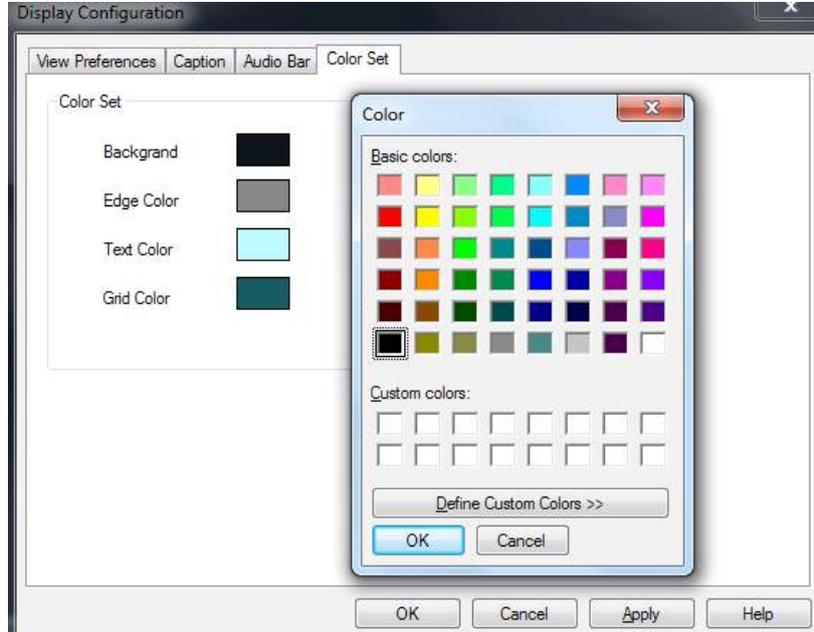
- 5.1 channel: set the position of 5.1 dably



**Color Set Tab:**

This tab support color setting for decoding service on window:

- Background: default as black
- Edge: default as grey
- Text: default as blue
- Grid: default as green

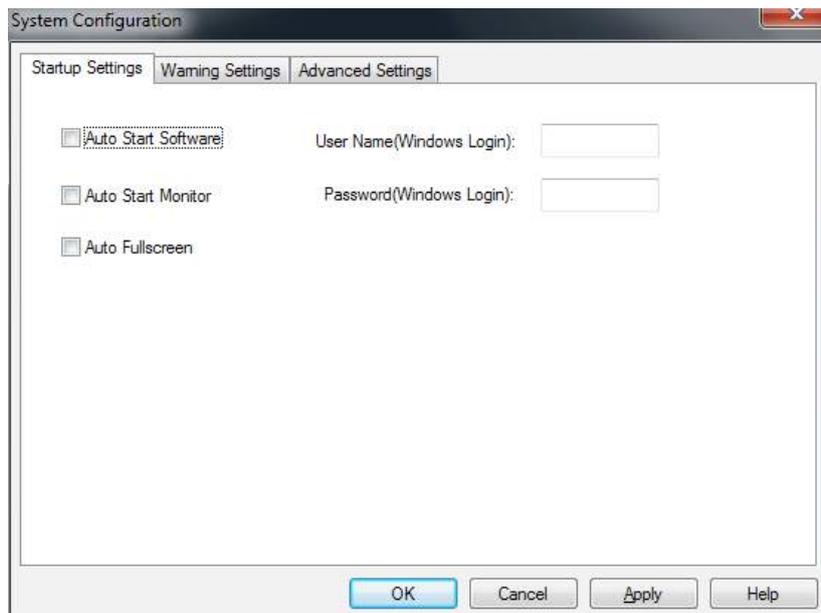


4.3.7 System Configuration

**Startup Settings Tab**

This tab provide customized launching style of software:

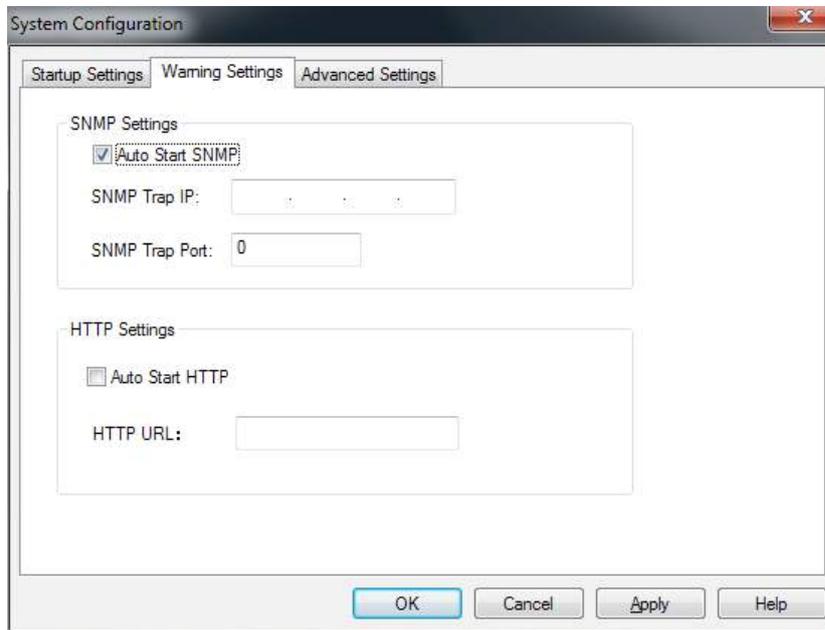
- Auto Start
- Auto Monitor
- Auto Fullscreen
- User Name and Password



### Alarm Settings Tab

This tab provide alarm log interface with SNMP or HTTP to 3<sup>rd</sup> party

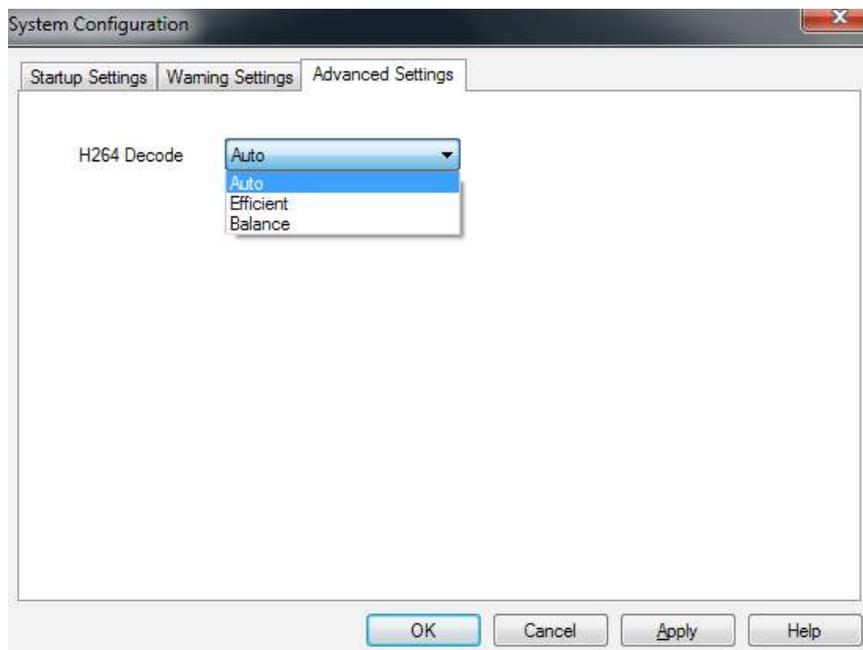
- SNMP trap
- HTTP



### Advanced Settings Tab

This functional tab provide H.264 format service's decode efficiency in order to save CPU capacity:

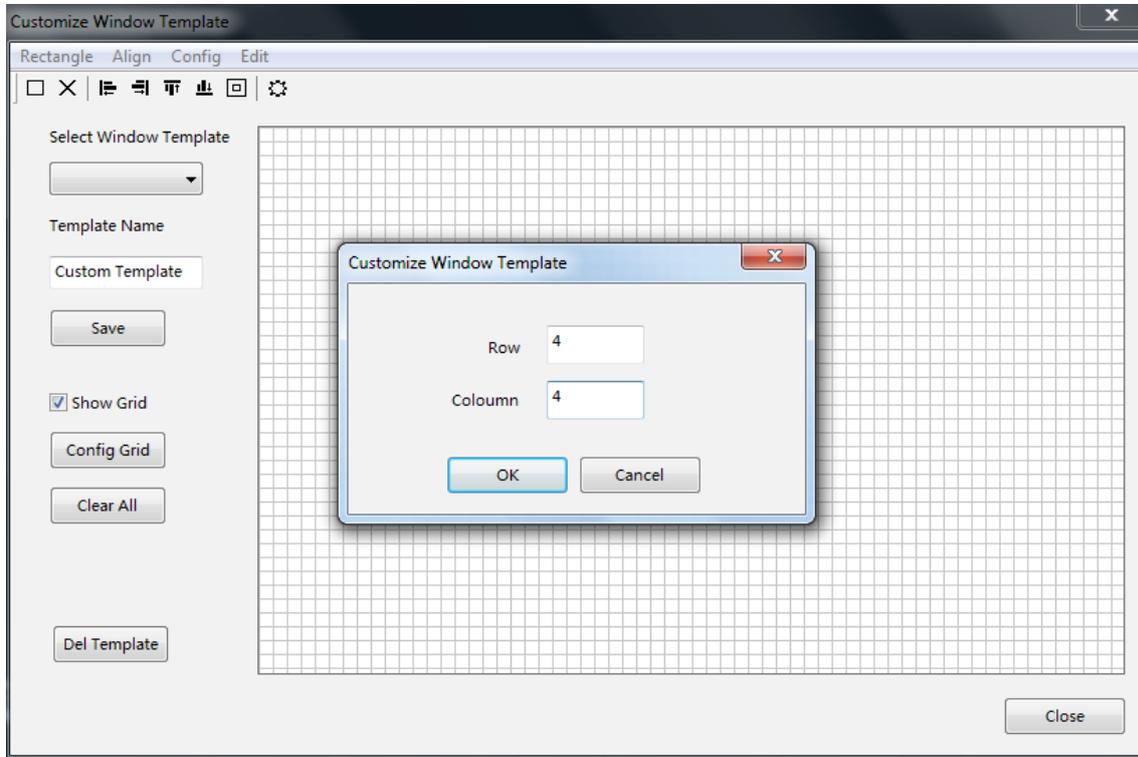
- Auto---enable this option would decode by original stream resolution
- Efficient---enable this option would decode by frame extracting
- Balanced---enable this option would decode by balanced frame extracting



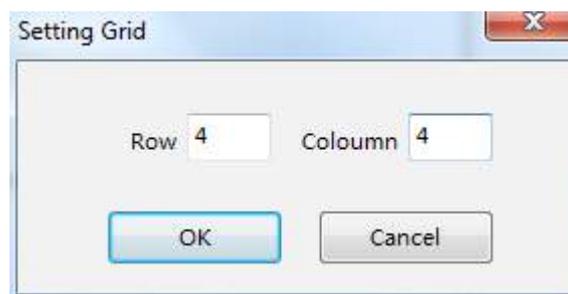
## 4.4 Window

### 4.4.1 Customize Window Template

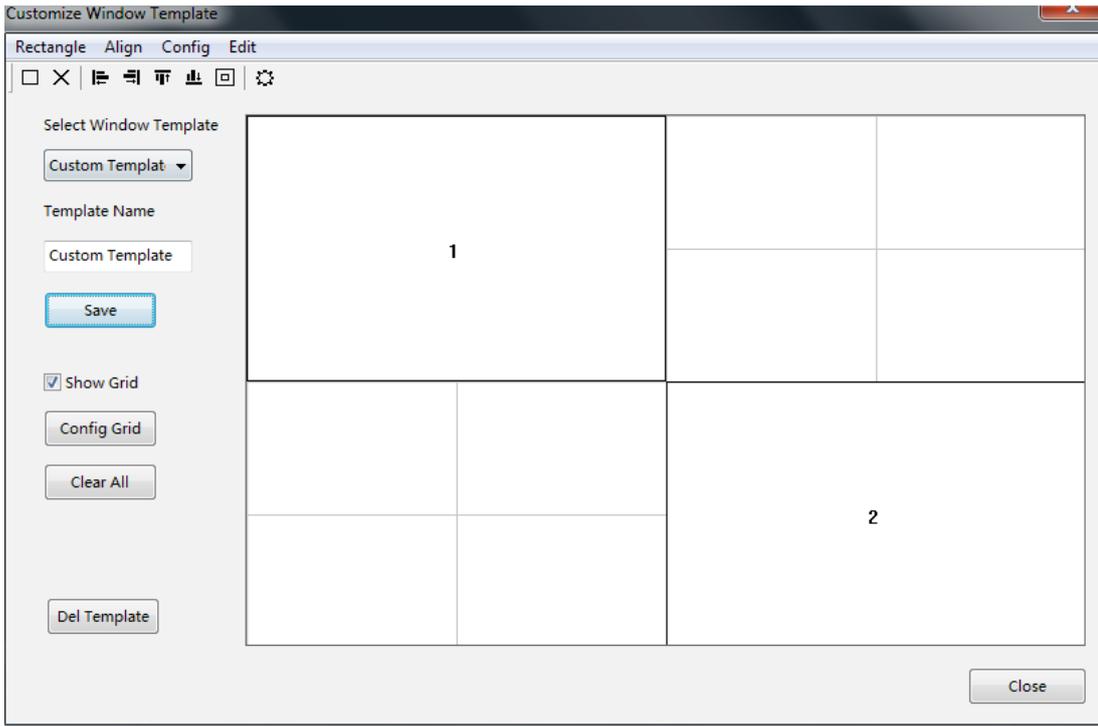
Layout Tool: This tool could support draw window much more easier and flexiable.



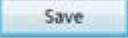
The self-defined template supports to save five self-defined templates. A user can draw the image template at will on demand. Select a customize template from the right drop-down of the “Select customize template”, set grid’s row and column and shown as below:

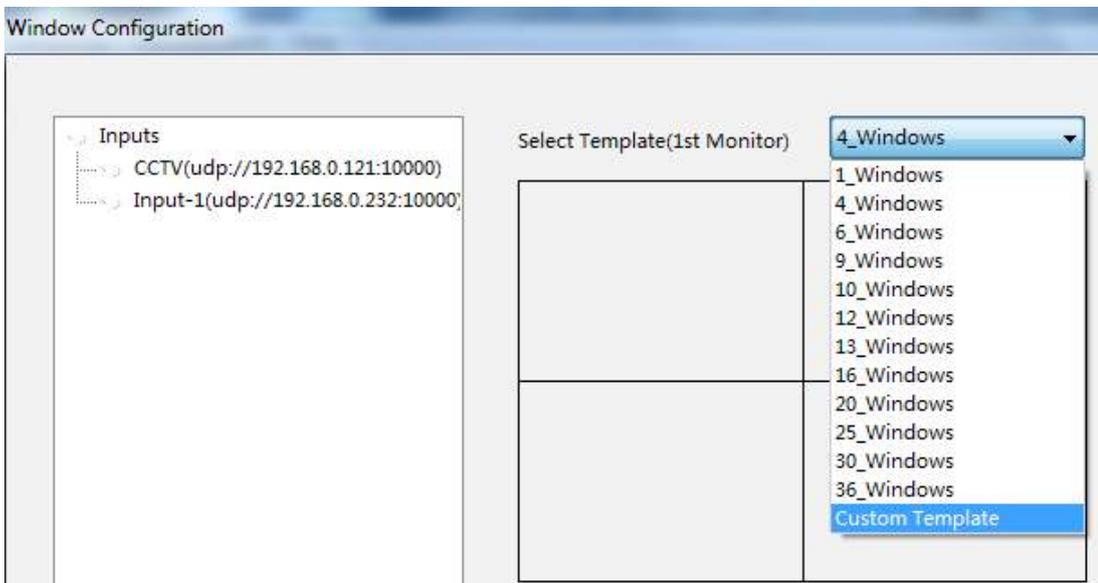


Click  to define rectangular:



To click  button, you can start to draw a template. To click and drag the mouse, you can draw the image rectangle. You can draw at most 36 images. to click "ok" button, you can draw multi-image self-defined template.

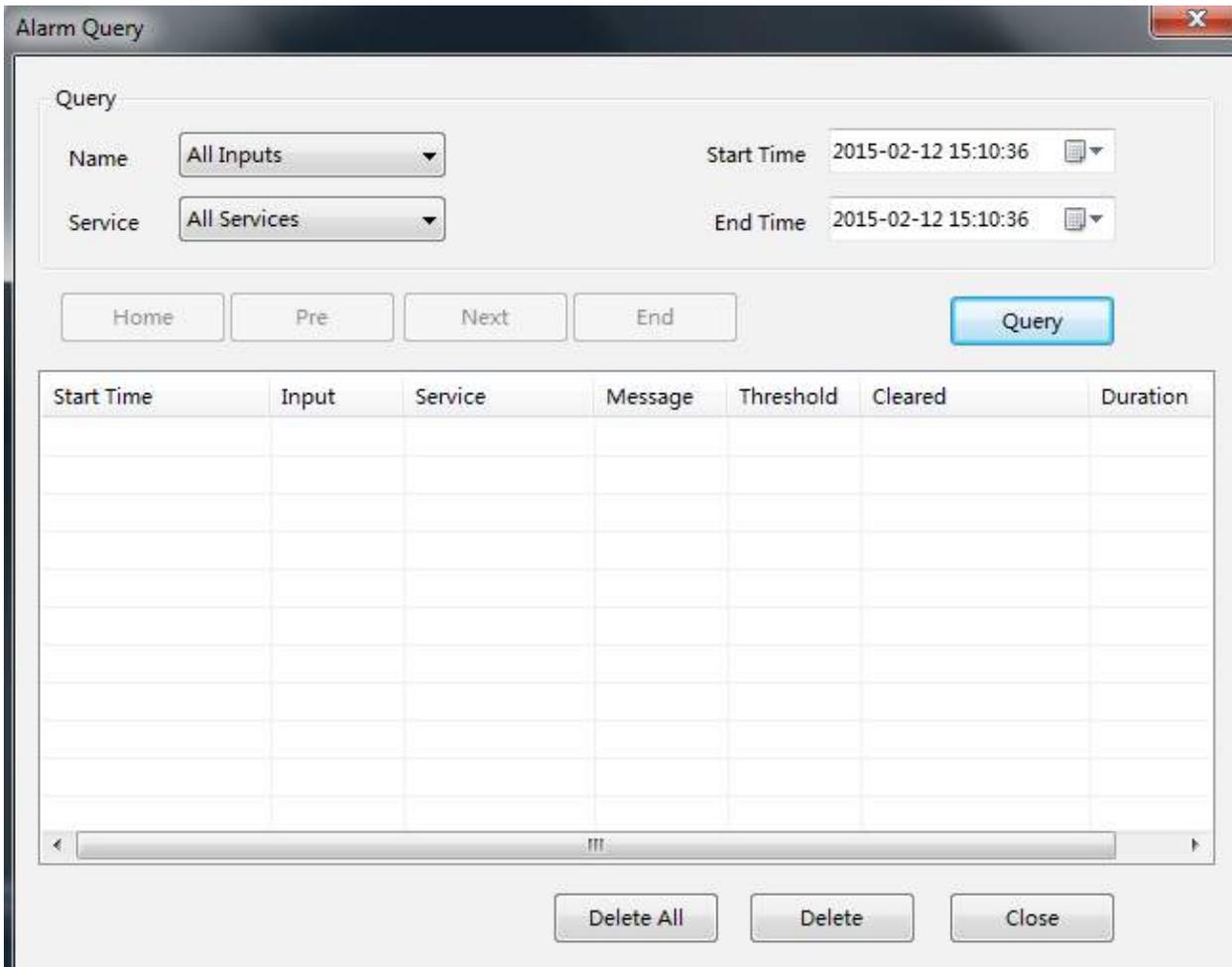
To click  button, the customized template would be saved and auto shown in window configuration:



## 4.5 Query

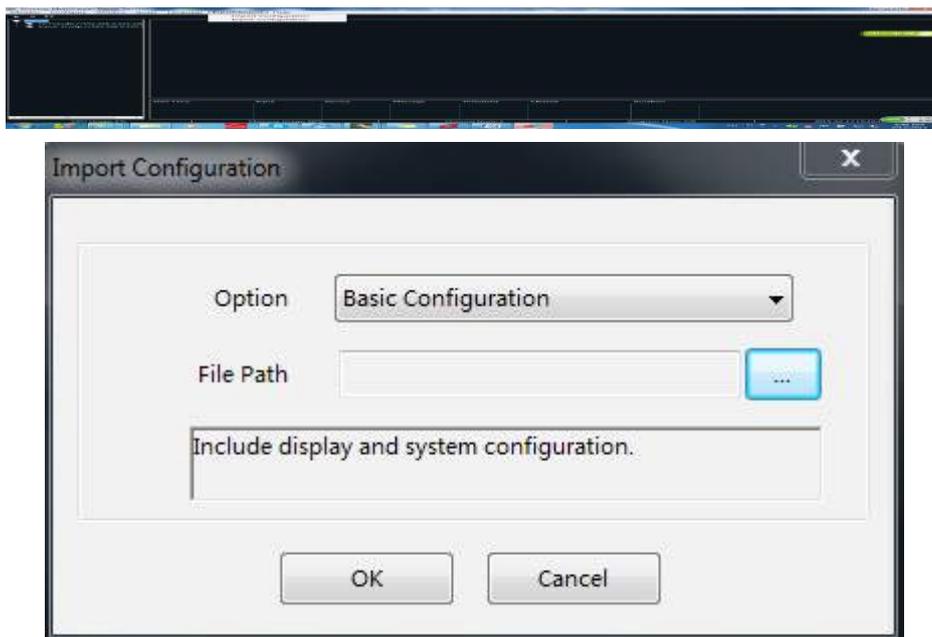
### 4.5.1 Alarm Query

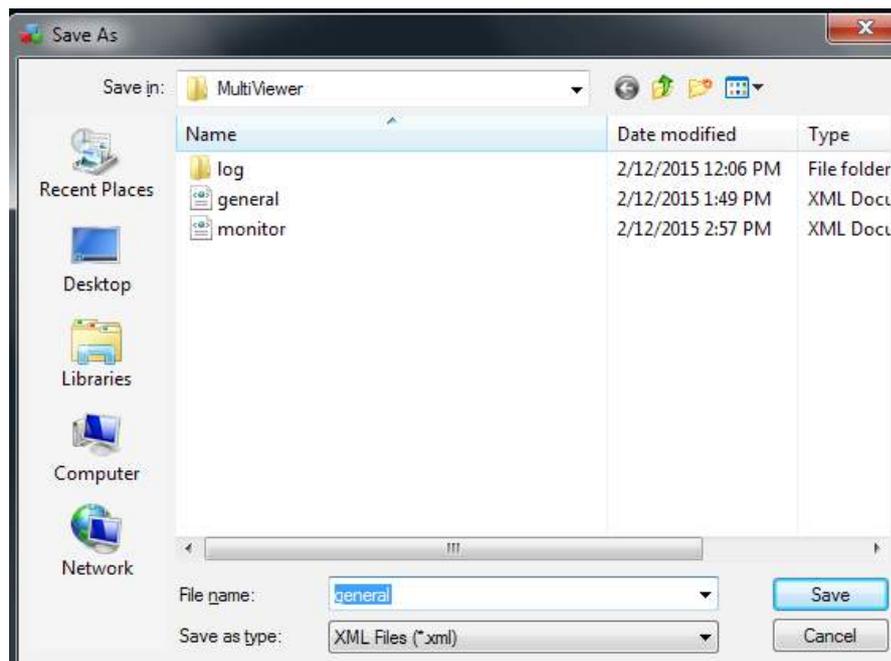
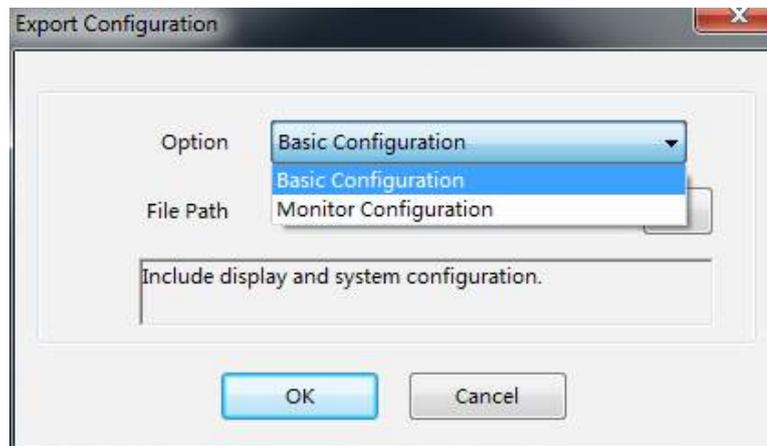
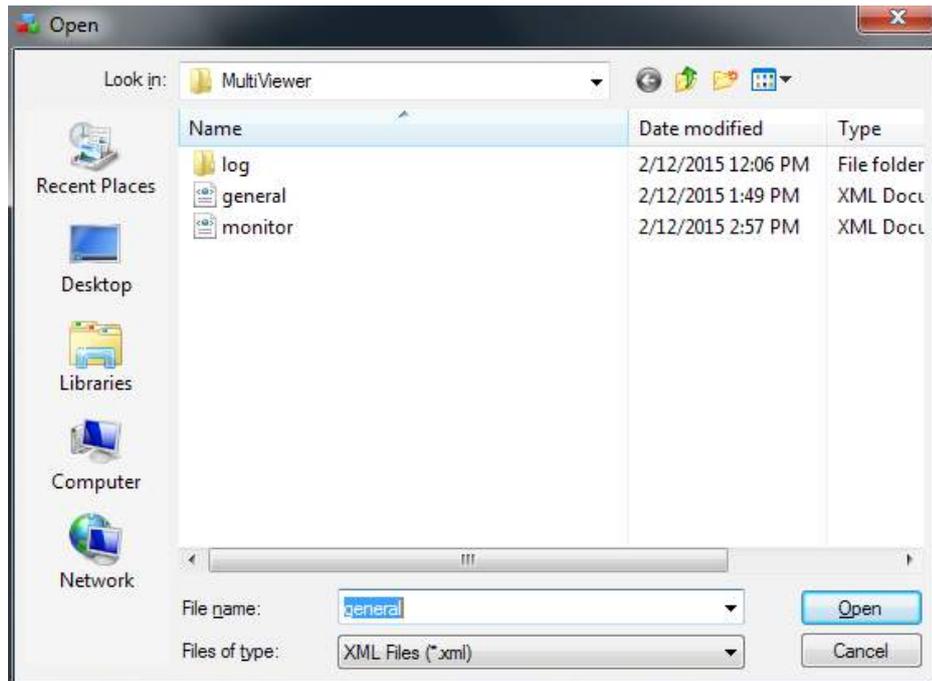
Click Query button and search the alarm by service, name, in a certain period time, shown as below:



#### 4.6 Import/Export

Import/export page is designed for saving "basic configuration", "monitor configuration" into XML files, or import/load these configurations from XML file, shown as below:





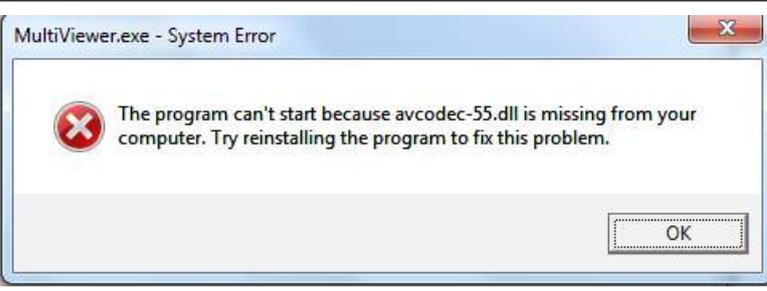
# Chapter V Radio Program Monitoring

## 5.1 Radio program monitoring

ANTIK MultiViewer Software also supports radio program monitoring. When “Analyze All”, the MultiViewer Software will automatically analyze whether the program is a radio program in the stream. For a radio program, the software will display left and right volume bar and can monitor the audio loss, high volume and low volume, shown as below:



## Chapter VI Troubleshooting

Error Pop-Up Window or Message	Solution
	<p>Installation not successful, please uninstall the software and reinstall.</p>
	<p>No valid Video PID or Audio PID detected from feeding stream</p>
	<p>Seriously Mosaic might be caused by CPU capacity overloaded, check the hardware configuration of Mosaic server</p>
	<p>Black window might be caused by encrypted stream, please confirm the stream is free or not</p>
<p>Error Message: "Cannot connect to database"</p>	<p>Please refer MySQL database installation steps</p>
<p>Error Message: "Invalid License"</p>	<p>Please contact ANTIK Technology or reseller to renew the license file.</p>

## **ANTIK Technology**

<http://www.antiktech.com>

Address: Čárskeho 10, SK-04001 Košice, Slovakia

Tel: +421-55-3012345

Web: [www.antiktech.com](http://www.antiktech.com)

Email: [info@antiktech.com](mailto:info@antiktech.com)

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The logo for ANTIK technology is displayed on a red background. It features the word "ANTIK" in a bold, italicized, white sans-serif font, with three slanted parallel lines to its left. Below "ANTIK", the word "technology" is written in a smaller, lowercase, white sans-serif font.

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