

ST7501 White Paper

Streaming Server

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Revision History

Version	Issue date	Editor	Comment
0.1	2009/04/15	Leo	First draft
0.2	2009/04/16	Leo	Add Easy connect to live streaming on the Internet
0.3	2009/05/05	Leo	Add to get streaming URL command on the local server and
1.0	2009/05/25	Leo	First release
1.1	2009/06/05	David Liu	Checked and modified grammer
1.2	2009/06/18	Peggy	Add new method to disable RTSP authentication on page 7.

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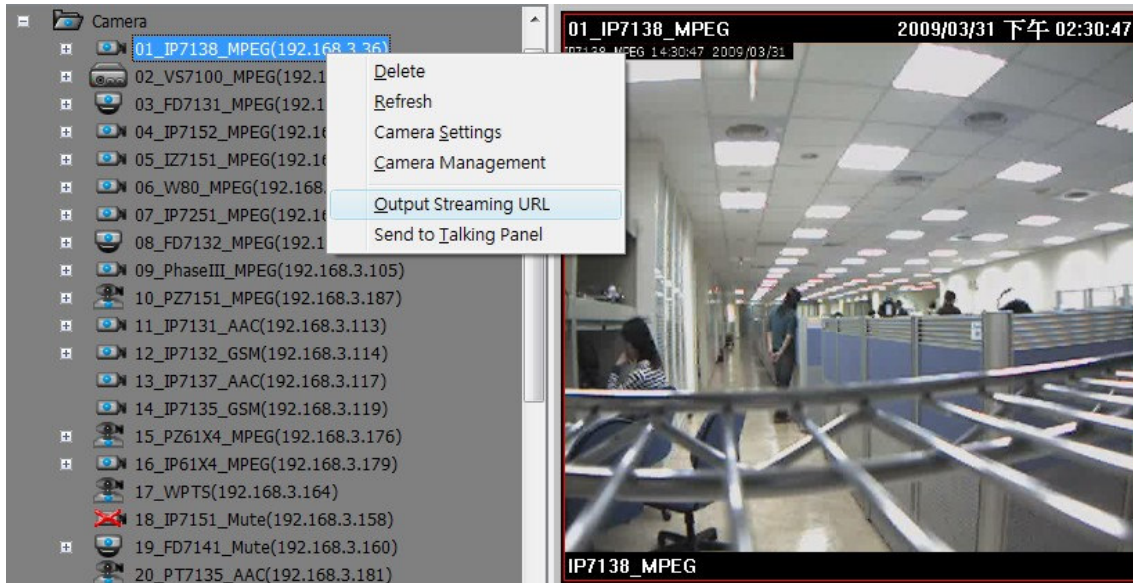
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How to Use ST7501 Streaming Server

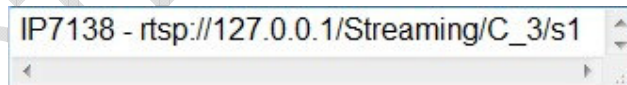
A. Connect to RTSP Player via URL command

1. Choose the camera which you are interested in and right click on the camera icon, then click the “Output Streaming URL” menu item from the popup menu.



Get Streaming URL Command

2. You will see the camera name and related streaming URL in a notepad window when you log into the local server. In this case, rtsp://127.0.0.1/Streaming/C_3/s1 is the streaming URL of the camera.



Local Streaming URL Command

Protocol: RTSP

Server IP: 127.0.0.1

Camera: /Streaming/C_3

Stream index: s1

3. Then you will get the camera name and related streaming URL on a notepad window when you log into a remote server. In this case, rtsp://192.168.3.144/Streaming/C_1/s1 is the streaming URL of the camera.



Remote Streaming URL Command

Protocol: RTSP

Server IP: 192.168.3.144

Camera: /Streaming/C_1

Stream index: s1

4. Open the QuickTime Player, input the URL, and then it will retrieve the streaming data from the streaming server of ST7501.



QuickTime Player

As QuickTime player only supports MPEG4+AAC codec, please set up your camera options to MPEG4 (Video) + AAC (Audio). Otherwise, the QuickTime player will not display the video normally.

5. IP Notice:

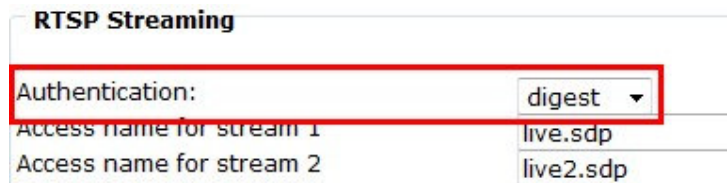
If your server is inside a firewall and you are logging in via a client from the Internet, you need to configure port forwarding on the firewall and change the IP of the server to an external IP.



Streaming URL Command on Internet

6. Authentication

Streaming server uses “digest” to authenticate the client. All account and password is the same as ST7501. As of this writing, VLC does not support RTSP digest authentication. You can use QuickTime player or other players which support digest authentication to view the camera.



RTSP Authentication settings by Firmware

If you have set Authentication to connect to the live streaming video, IE will ask you to input the user name and password



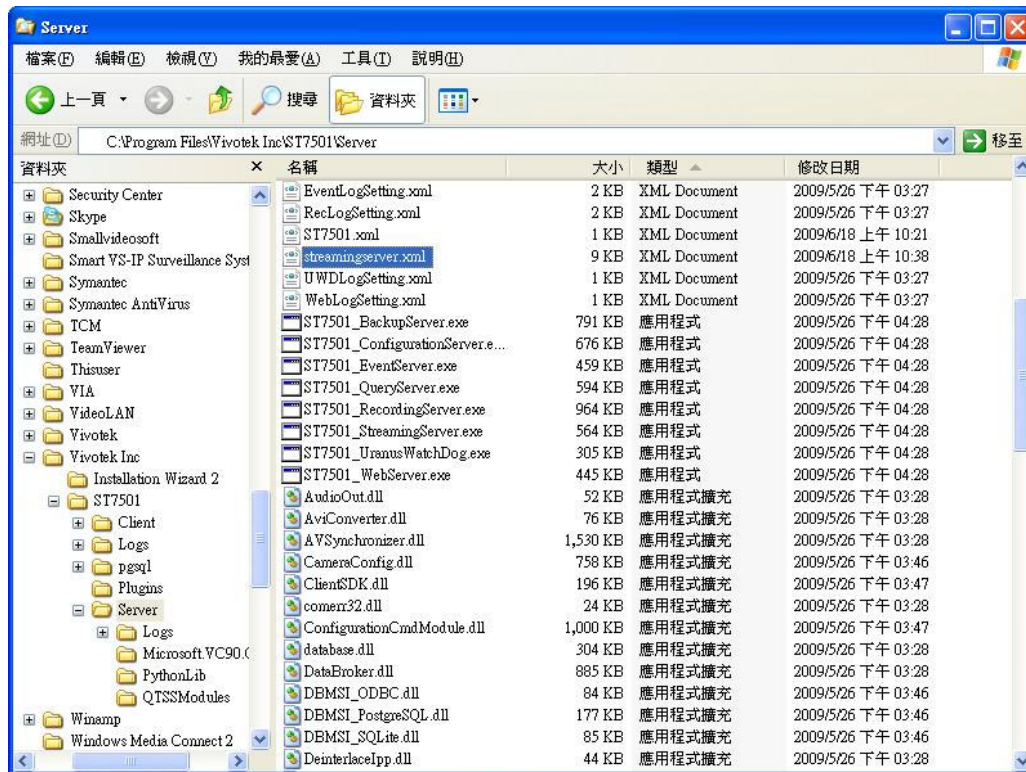
Authentication panel

You can view all live streaming via the streaming server without needing to certify each camera.

7. Cancel RTSP Authentication:

If you wish to view streaming via your client without authentication, please follow these steps to disable RTSP authentication:

- Go to the ST7501 installation directory, find “[Server\streamingserver.xml](#)”.
- Change the value of the parameter “[disable_rtsp_authentication](#)” to “[true](#)”.
- Restart the ST7501 service.



B. Easy Connection to Live Streaming over the Internet

1. When the camera is set up over the Internet, if you want to view live streaming, you will need open the specific port (HTTP, RTSP, RTP, RTCP) from the router.

HTTP	
Authentication:	basic
HTTP port	80
Secondary HTTP port	8080
Access name for stream 1	video.mjpg
Access name for stream 2	video2.mjpg

HTTPS	
HTTPS port	443

Two way audio	
Two way audio port	5060

FTP	
FTP port	21

RTSP Streaming	
Authentication:	disable
Access name for stream 1	live.sdp
Access name for stream 2	live2.sdp
RTSP port	554
RTP port for video	5556
RTCP port for video	5557
RTP port for audio	5558
RTCP port for audio	5559

Port settings in the firmware

For multiple cameras, you will need to forward the appropriate ports for each one.

2. You can only open an RTSP port (default 554) via the streaming server and then connect to all live streams.

Port Settings	
Server port:	3454
RTSP port:	554
Save	

Network settings on ST7501

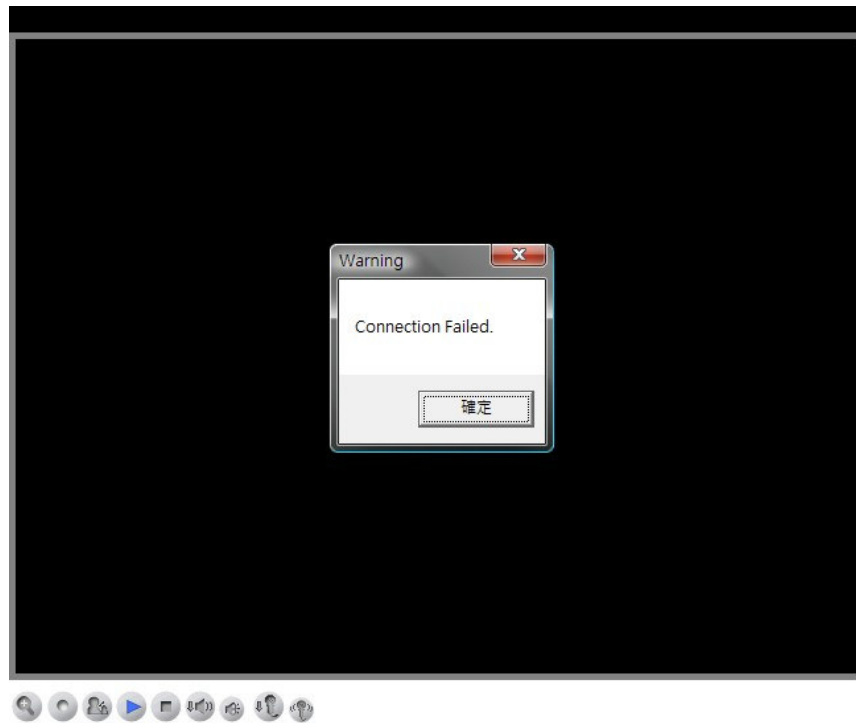
Server port: Login server

RTSP port: Connect to live streaming

※You need to forward the streaming port for your server when the port is occupied.

C. Advantages

1. Only ten direct connections for each camera are allowed.



With over 10 connections, the connection fails.

2. With the ST7501 streaming server, more connections are allowed.

