

# Protocols for Antrica Video Servers and IP Cameras Using VLC or similar RTSP decoder

2009.5 Antrica

# 1. Overview

This document describes how to access Antrica video server or IP camera for the following purposes.

- (1) Get media stream from the server
- (2) Get events from the server and set the servers ports such as relay
- (3) Configure the server's setting
- (4) Control PTZ

(1) is covered in Section 2, and  $(2)\sim(4)$  are covered in Section 3.

This document is for the client application developers who don't want to use the client SDK by Antrica or VLC player as a decoder.

## 2. Media Streaming

#### 2.1 Protocol

Audio and video streaming from server to client conform to RFC standards.

| Streaming and direction               | Protocol   | Remarks                            |
|---------------------------------------|--|------------------------------------|
| Server -> Client<br>- Audio and video | <ul> <li>RTP(RFC1889)/RTSP(RFC2326)</li> <li>RTP over RTSP(TCP)</li> </ul>                             | Video: H.264<br>Audio: G.711 u-law |
| Client -> Server<br>- Audio           | <ul> <li>Non standard*<br/>(Refer section 2.8 SendAudio of<br/>"Antrica HTTP API" document)</li> </ul> | Audio: G.711 u-law                 |

#### RTSP URL

Single channel single stream video server or IP camera

| Stream                    | URL(Address)                  |
|---------------------------|-------------------------------|
| Channel #1 primary stream | rtsp:// <ip address="">/</ip> |

### Multi-channel / Dual stream video server or IP camera

| Stream                      | URL(Address)                         |
|-----------------------------|--------------------------------------|
| Channel #1 primary stream   | rtsp:// <ip address="">/video1</ip>  |
| Channel #1 secondary stream | rtsp:// <ip address="">/video1s</ip> |
| Channel #2 primary stream   | rtsp:// <ip address="">/video2</ip>  |
| Channel #2 secondary stream | rtsp:// <ip address="">/video2s</ip> |

#### Additional remarks

1. RTSP over HTTP tunneling will be supported soon.

## 2.2 Conformance Test

It has been tested with VLC Player(v0.8.6). Since VLC Player doesn't support decoding of interlaced mode(352x480 and 720x480), it is necessary to set Encoding mode of server/camera to 'Frame' mode. VLC shows broken video if Encoding mode is set to 'Field' mode.

## 2.3 Operational Characteristics

Server disconnects RTSP connection when a setting which affects video encoding is changed

- Resolution, I-frame interval etc.

# 3. Events, Control and Configuration

The protocol for getting events from server, control the server and configure the server follows the scheme called 'HTTP API' which is widely used in the industry.

Please refer to the following document for the details of HTTP API.

- HTTP API Antrica HTTP API for Video Server and IP Camera

- Parameters for HTTP API Configuration Parameters (ANT-XXXX series)