Generic RTSP Driver Setup

For cameras that do we do not directly support, we offer another solution: Generic RTSP streaming. This is a streamlined version of the driver we use for the other cameras and will offer limited functionality as far being able to configure the camera through the ESM Admin UI.

Overview:
Essentially, we will be taking the RTSP streaming URL, commonly found in the camera specific API/SDK, offered through the manufacturer and telling ESM to use this URL to stream and record video feeds.

In this example, a HIKVision camera will be added to ESM.

Procedure:

We will start by first locating the RTSP streaming URL in the HIKVision SDK here:
http://www.hikvisioneurope.com/portal/index.php?dir=Integration%20and%20Development%20Materials/03%20%20%20RTSP/&file=HIKVISION%20RTSP%20IPMD%20V1.0.pdf

This document says that the RTSP stream URL is constructed via the following:
rtsp://ip_address:port_number/codec/channel/main_or_sub/av_stream

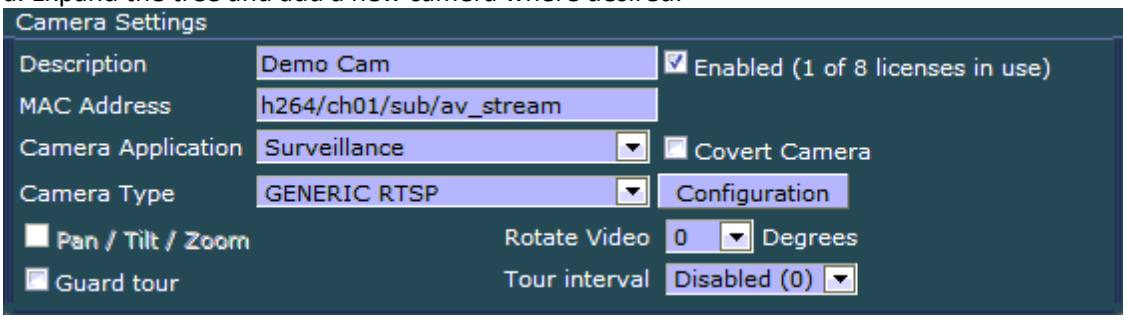
Here are samples of valid URLS
rtsp://192.168.1.100:554/mpeg4/ch1/main/av_stream
rtsp://192.168.1.100:554/h264/ch1/sub/av_stream

With this particular camera, it supports: codec (mpeg4/h264), channel (ch01/ch02), stream (main, sub) and the “av_stream” needs to be added to the end. The stream portion (main and sub) indicate two separate streams on the camera. The main stream offers high resolutions and the sub stream offers low resolutions. We will be showcasing h264 streaming over the sub stream.

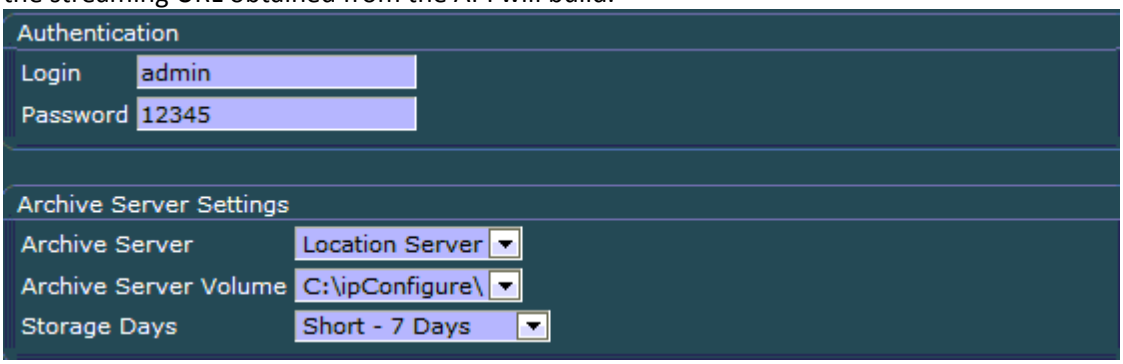
Now that the URL has been identified, the camera can be added to ESM.

Login to ESM admin and navigate to the “devices” heading. Ex: http://192.168.1.10/admin

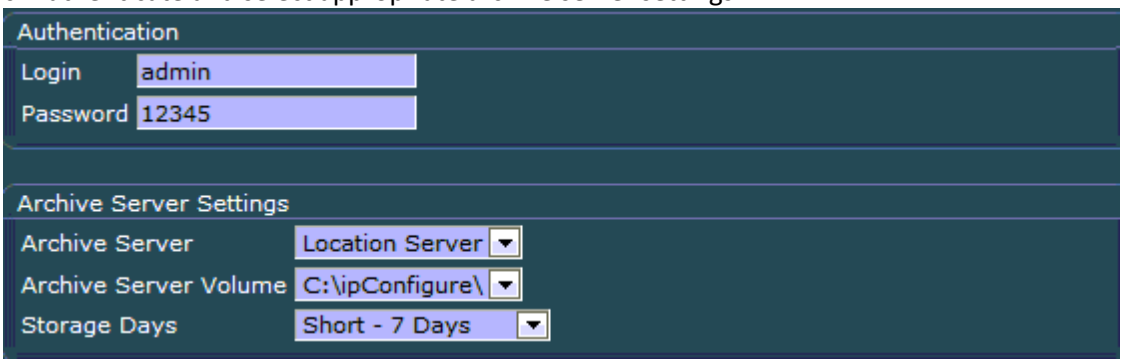
a. Expand the tree and add a new camera where desired.



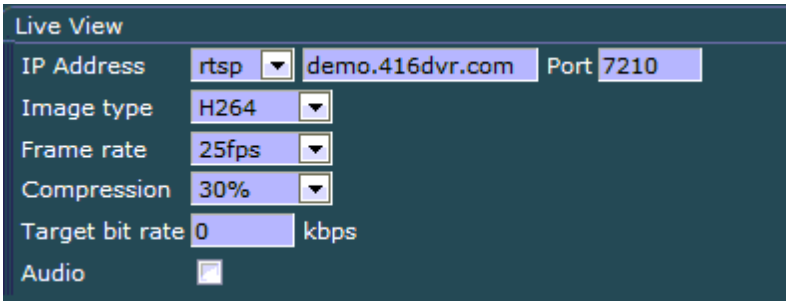
b. Name the camera. Enter the streaming address in the MAC field. “h264/ch01/sub/av_stream” ((will always be the same on HIKvision)) Choose “Generic RTSP” as the camera type. The MAC field is where the streaming URL obtained from the API will build.



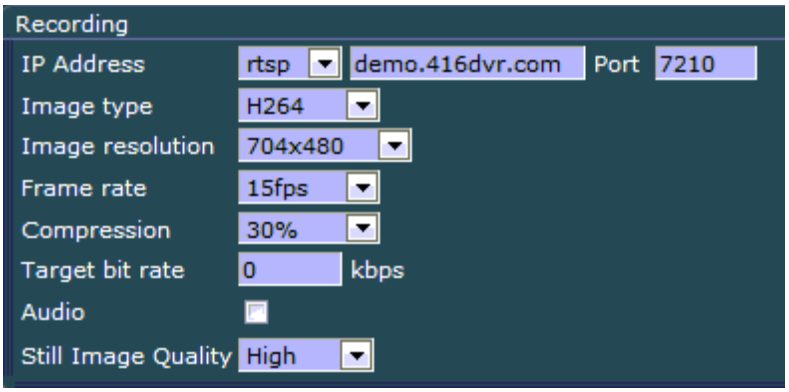
c. Authenticate and select appropriate archive server settings.



d.



For “Live View Settings”, choose RTSP as the protocol. Enter the camera address in the URL field. Ex: demo.415dvr.com Enter the RTSP port you noted in step 1d in the port field. Select h264 as the image type. Select anything for the frame rate. Select 30% compression.



The recording settings are what needs to match the settings on the camera in step 1.
Choose RTSP, enter the camera address and the RTSP streaming port. Select H264 as the image type. Apply the resolution of 704x480. Apply a frame rate of 15fps. Apply a compression of 30% compression.

e. 

Press apply.

***Note: The port in this example is 7210 because the IP has been resolved as a DNS name so that the camera could be accessed over the web. If you have a local network, most likely, the port will be 554 (default for RTSP) and the IP address field will be populated with the direct IP of the camera.