NovoDS IP Streaming

NovoDS is capable of receiving and decoding video streams over IP networks, making it suitable for IP-based video distribution systems. The following table summarizes the video streaming protocols supported by NovoDS.
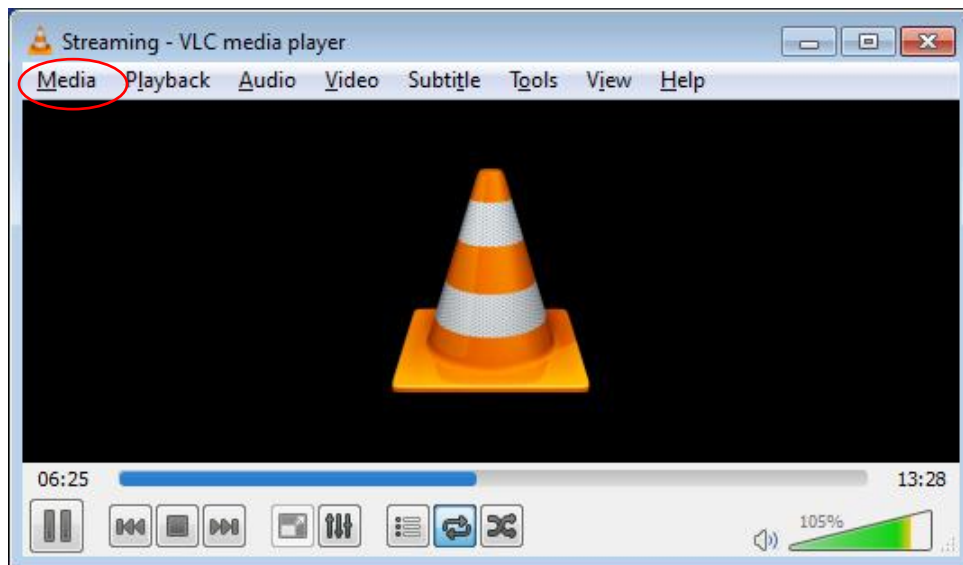
Protocol	Unicast	Multicast
UDP	No	Yes
RTP	No	Yes
RTSP	Yes	Not Applicable
MMS	Yes	Not Applicable
HTTP	Yes	Not Applicable

This document describes how to set up the video streaming "source" using VLC media player/server and the streaming "sink (receiver)" using NovoDS. Please note that VLC (http://www.videolan.org) is used as an example in this document to set up as the video streaming source in various protocols. Other software packages and/or hardware solutions can be set up similarly.
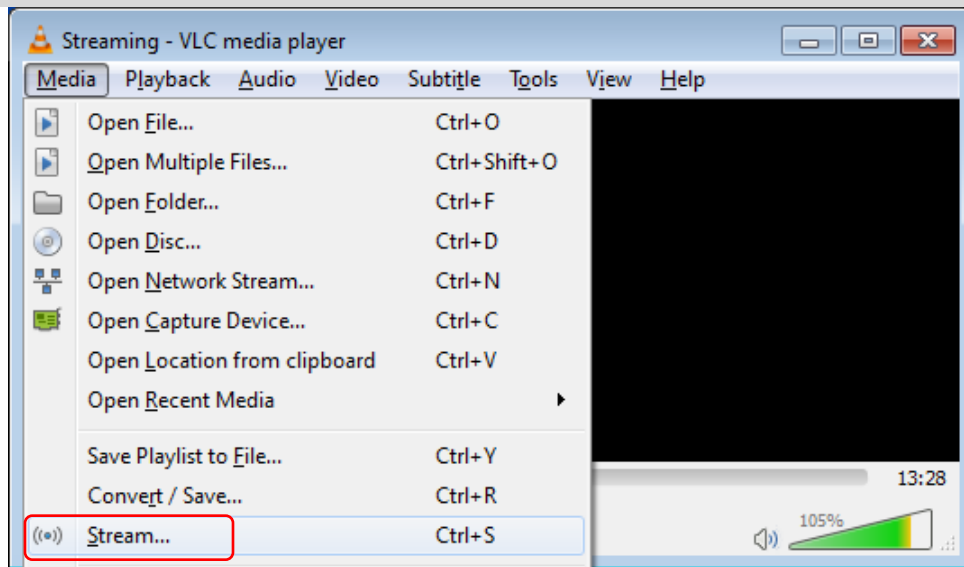
1. **RSTP**
(1) **Source: VLC Streaming Server (IP 192.168.1.79)**
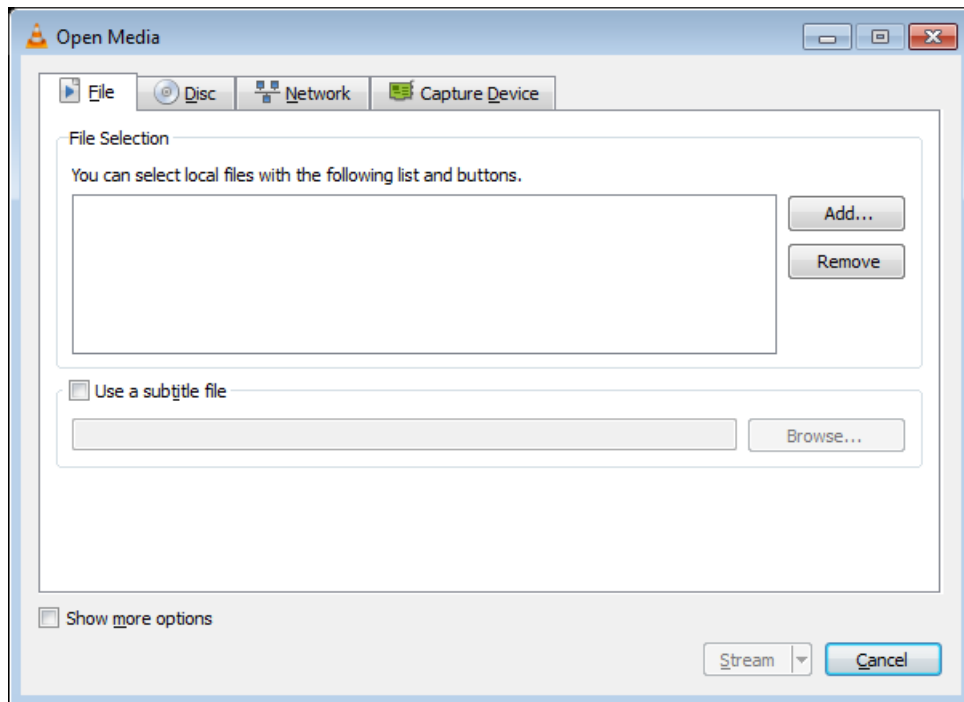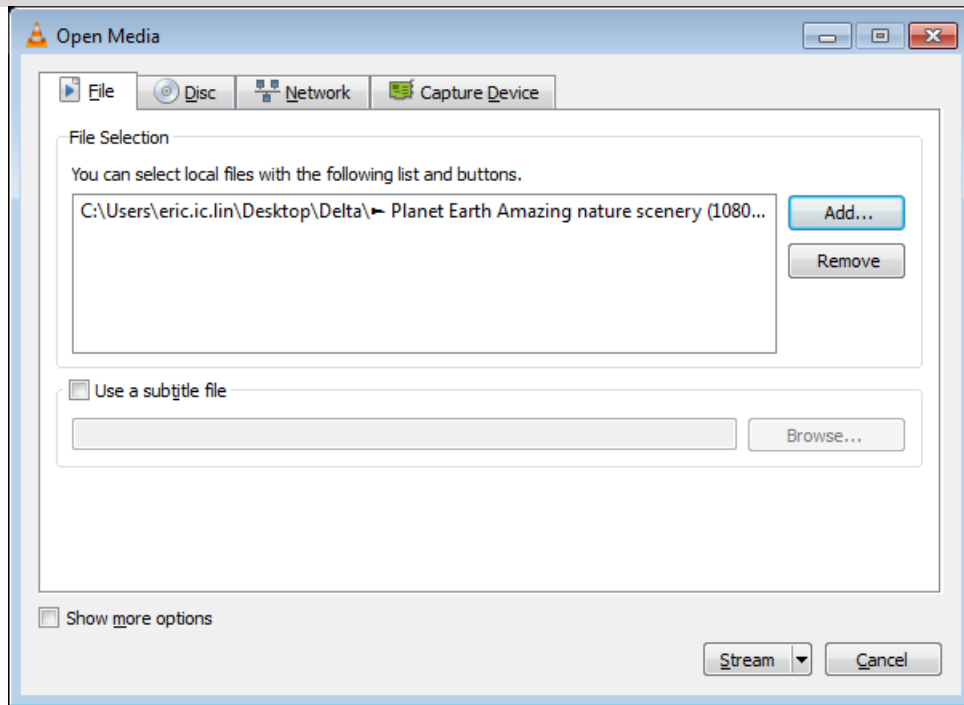   Click "Media" menu item.

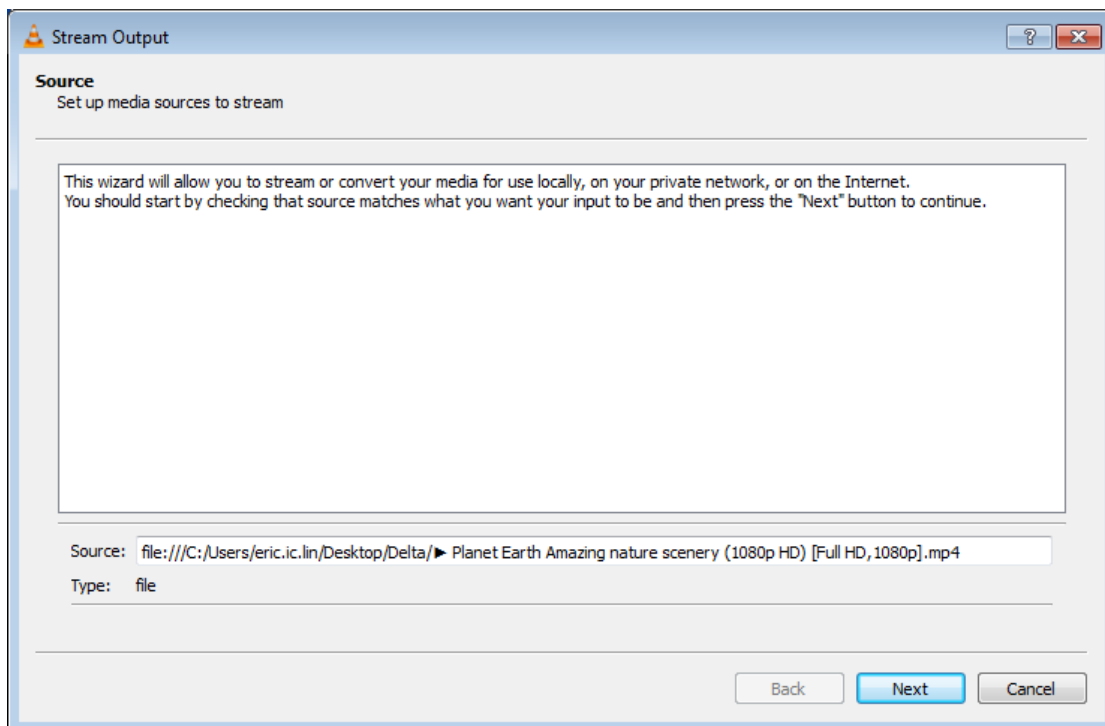   Click "Stream" to set up the streaming service.

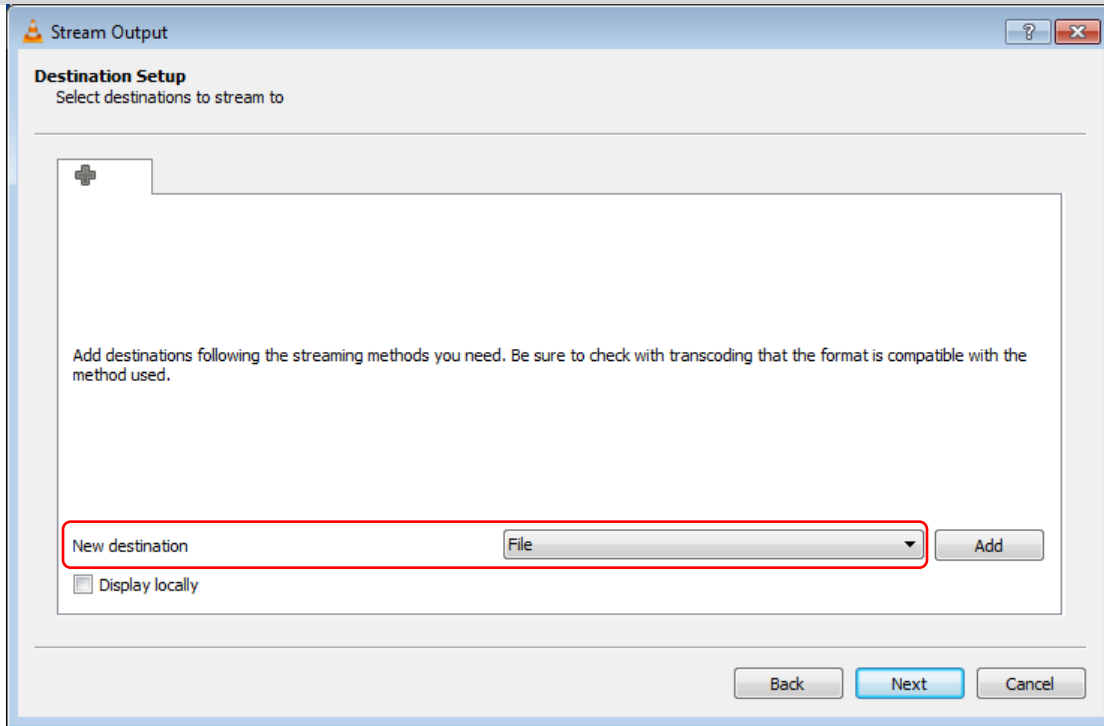Click "Add" to add a local media file for streaming.

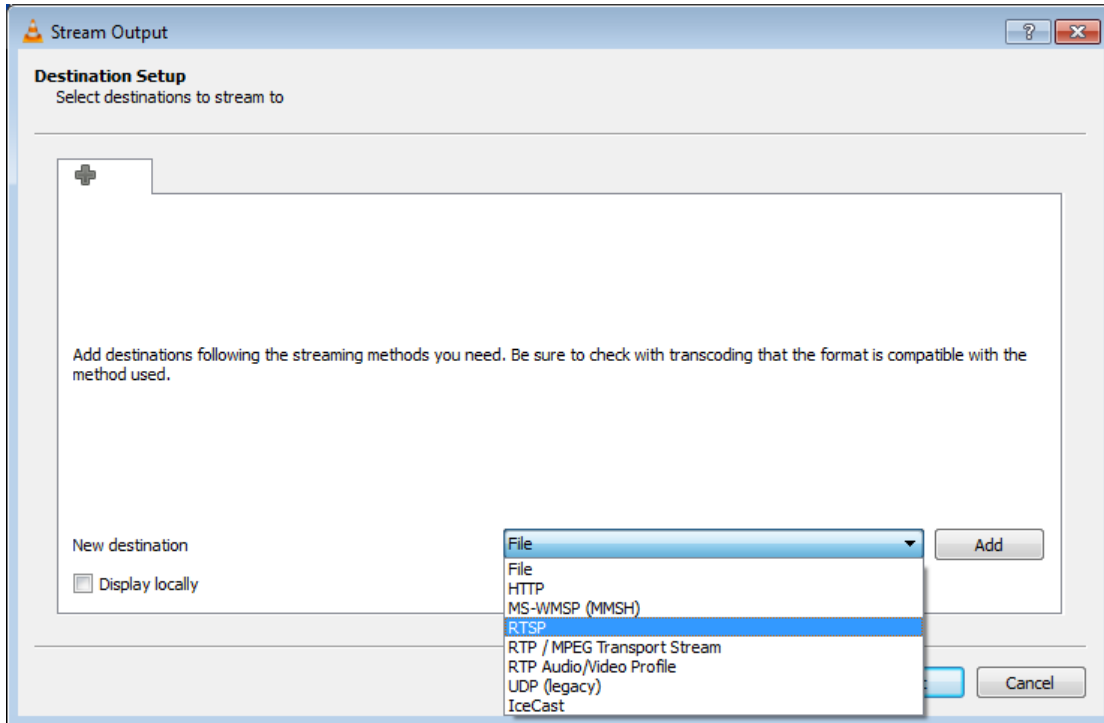Click "Stream" button to go to the next step.
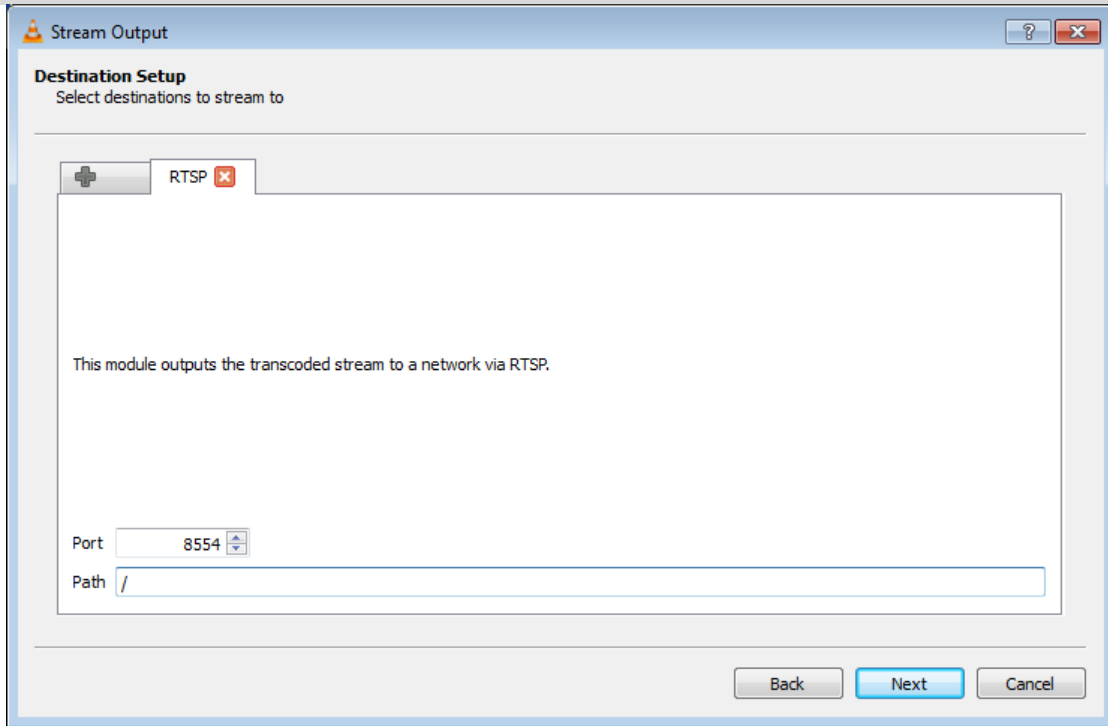
Click "Next" for the next step.
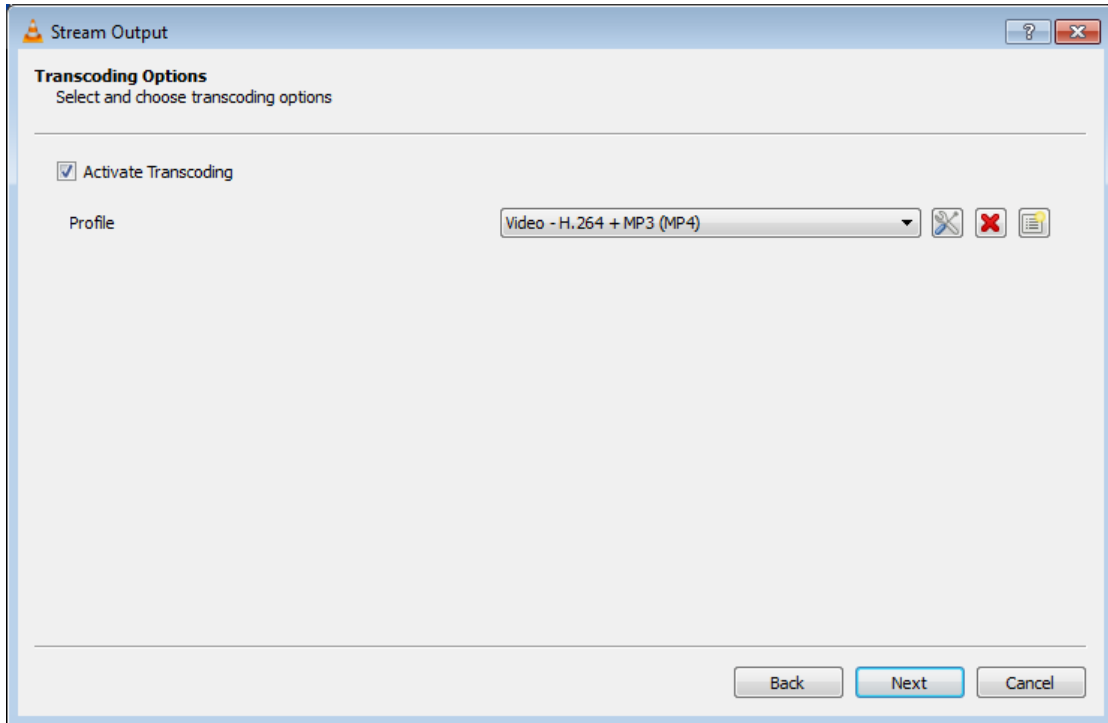
Select "New destination" dropdown box.

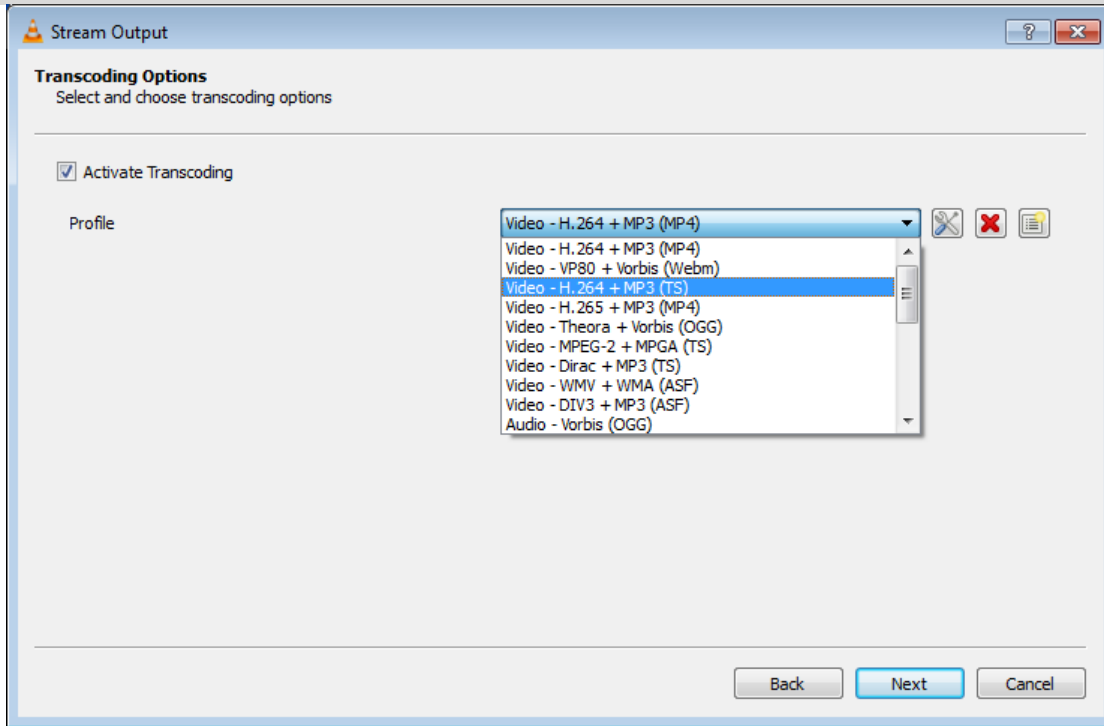Select "RTSP", and then click "Add" button to add such a service.

RTSP service is added, the default port **8554** is used. Click "Next" button for the next step.
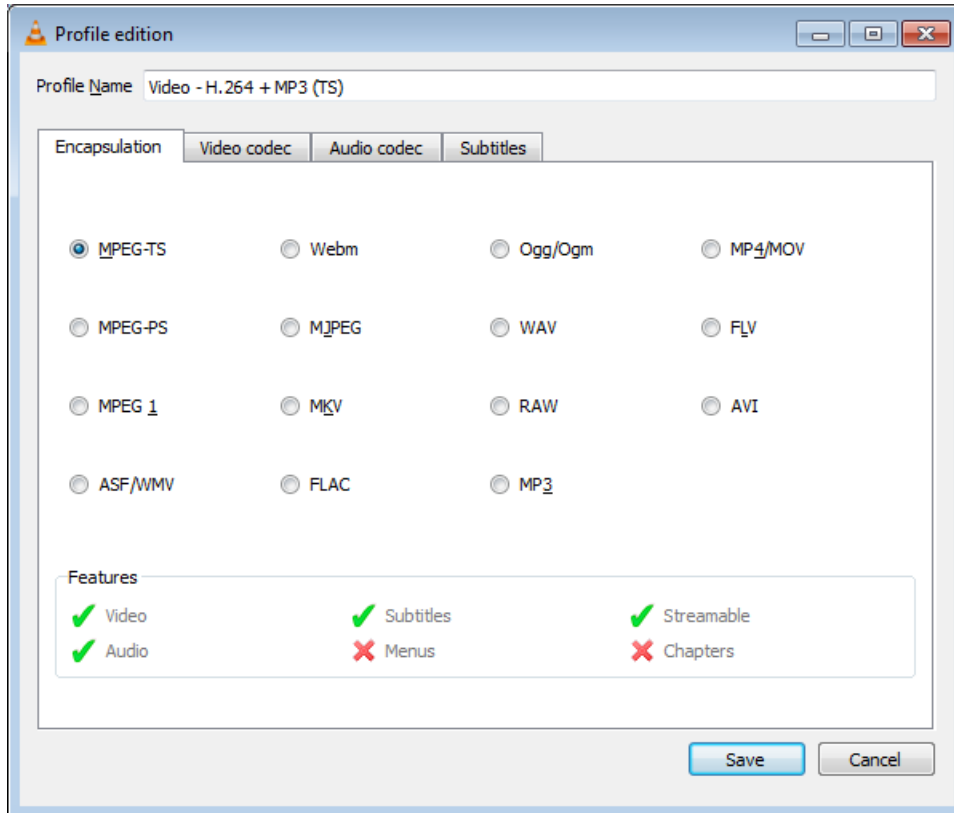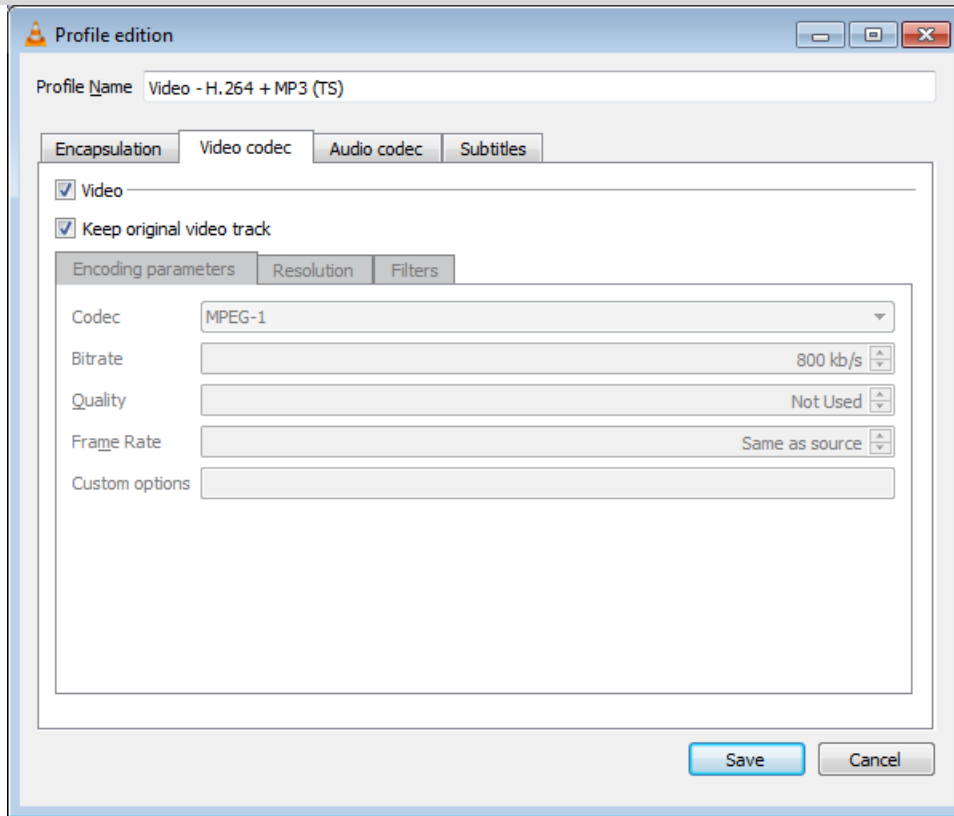
Select Transcoding Profile.
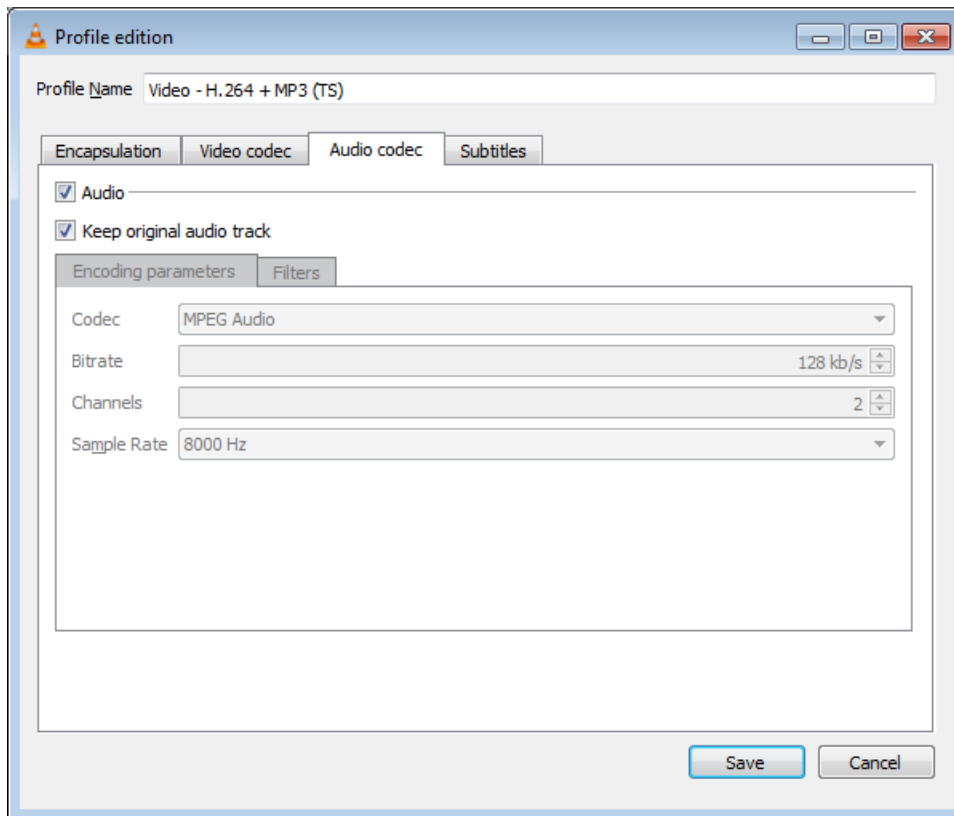

Select "Video – H.264 + MP3 (TS)" and click icon.

Click "Video Codec"

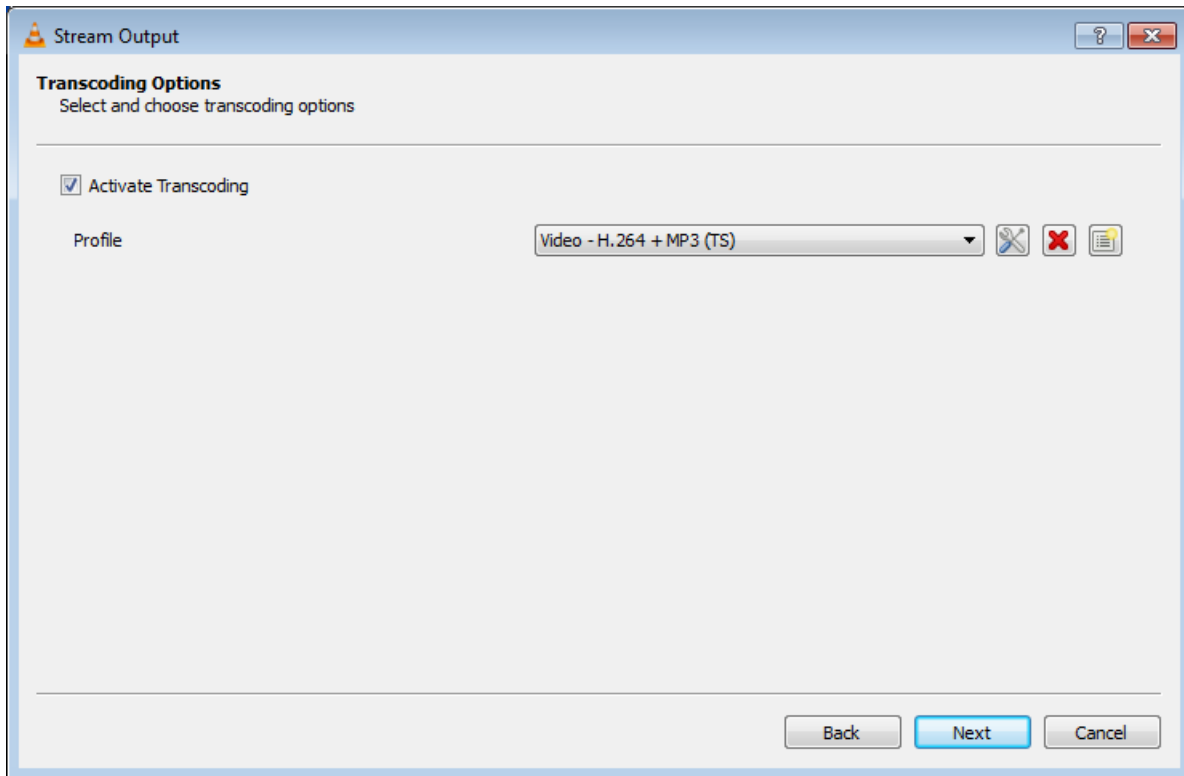Check "Keep original video track", click "Audio Codec"

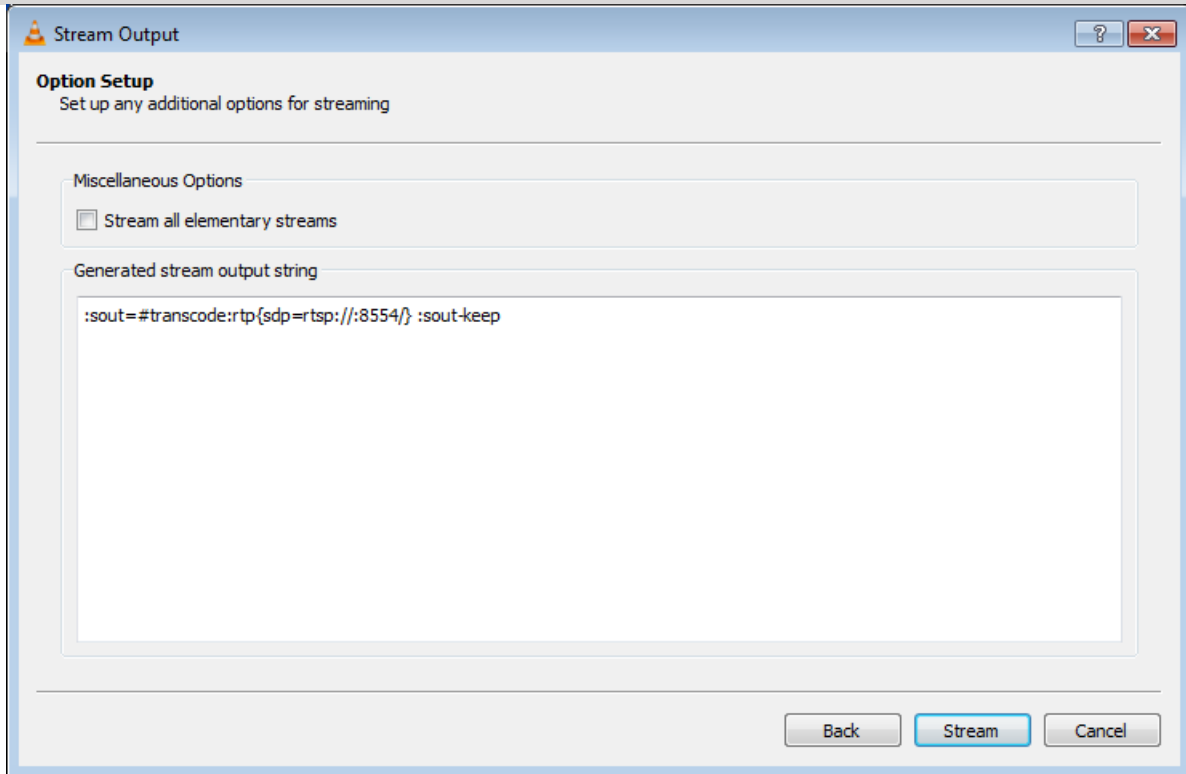Check "Keep original audio track", click "Save"

The "Video – H.264 + MP3 (TS)" profile is now updated. (You don't need to change this profile for subsequent setup.)
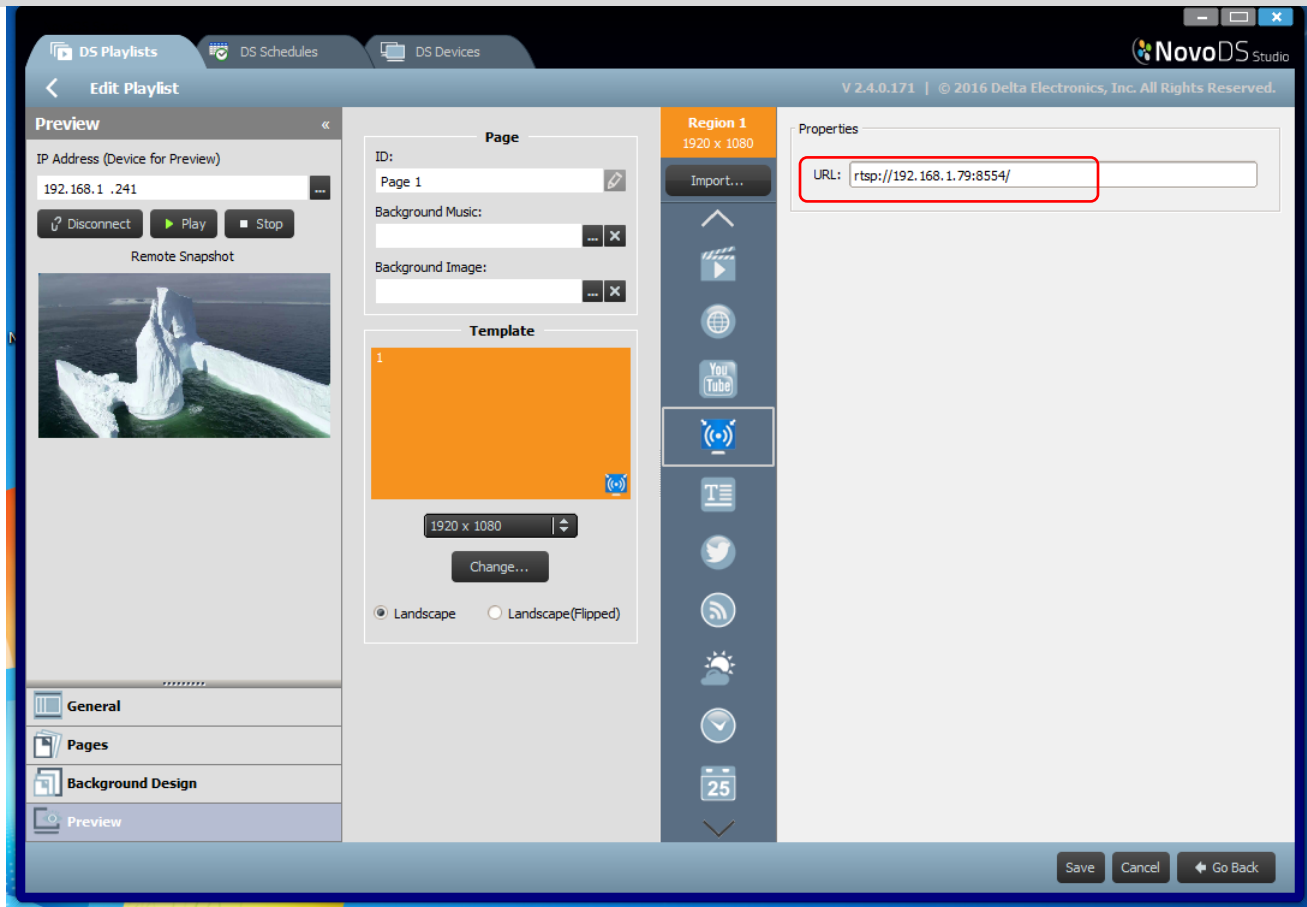
Now click "Next"

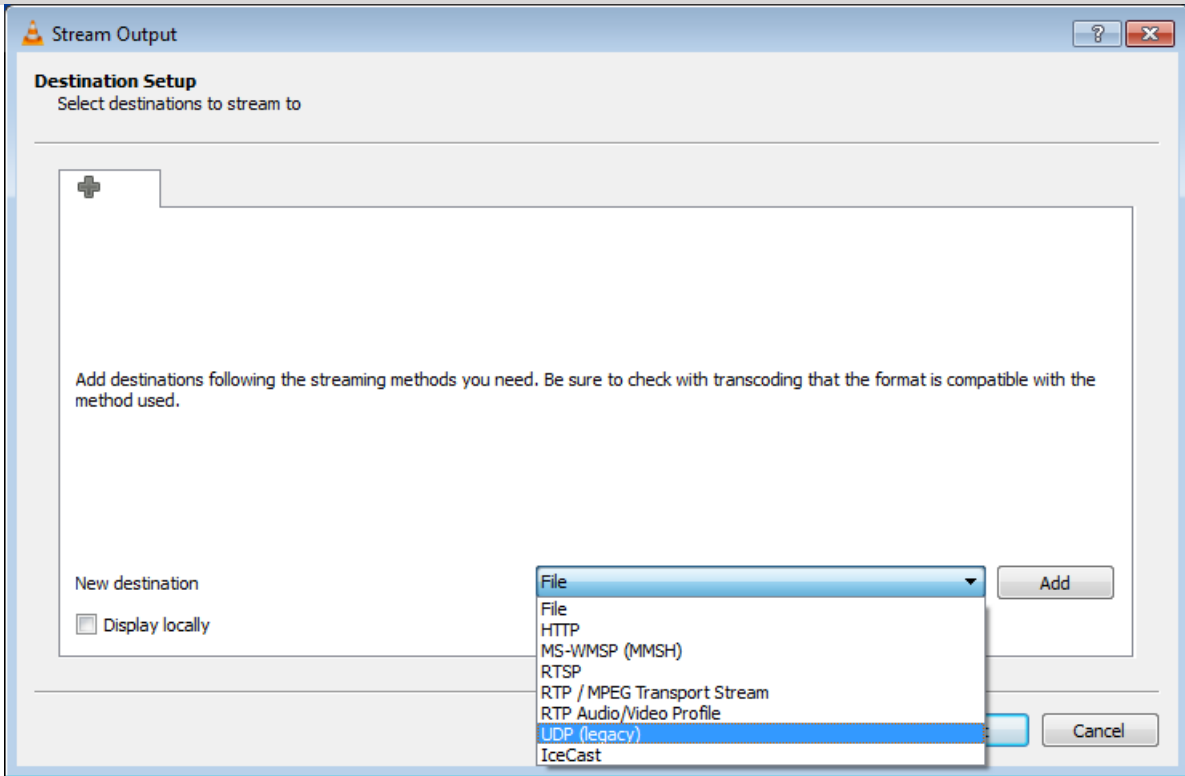Click "Stream" to start streaming.

(2) Sink: NovoDS Setup

Enter "rtsp://192.168.1.79:8554/" for the URL in NovoDS Studio software, as shown in the following figure. Make sure the URL is terminated with a "/". 192.168.1.79 is VLC system IP address.
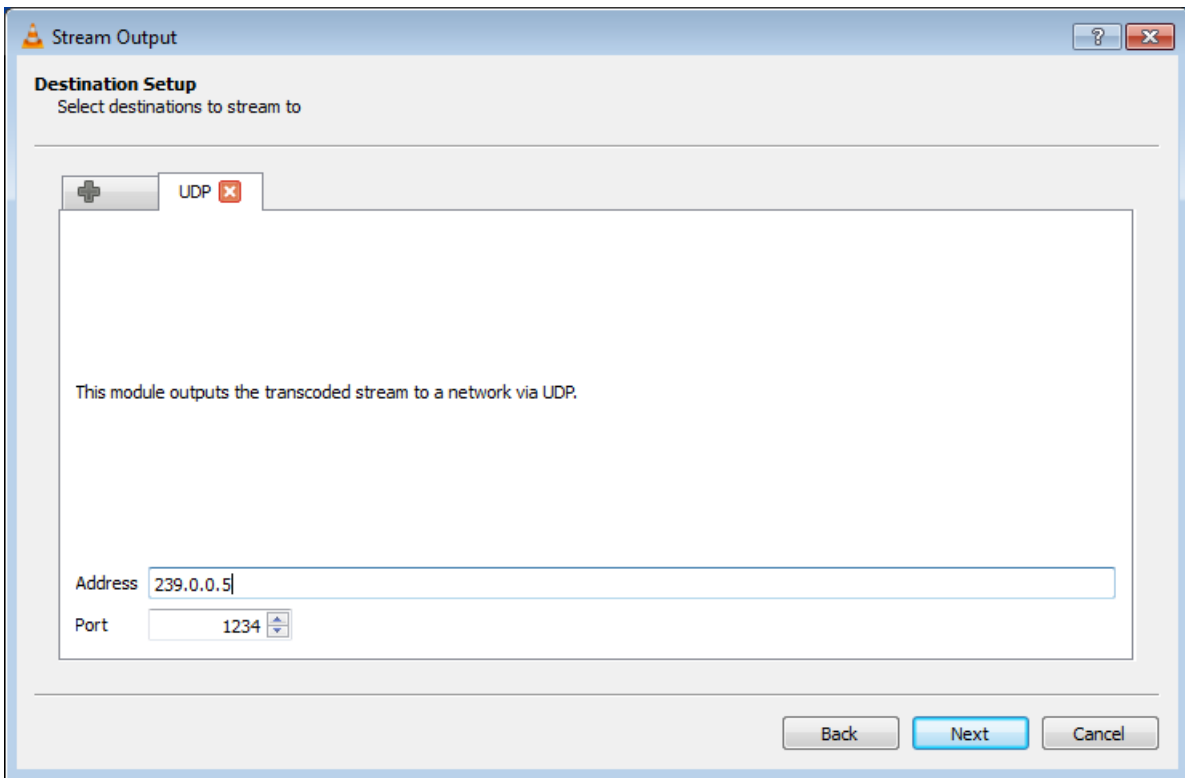
2. UDP Multicast

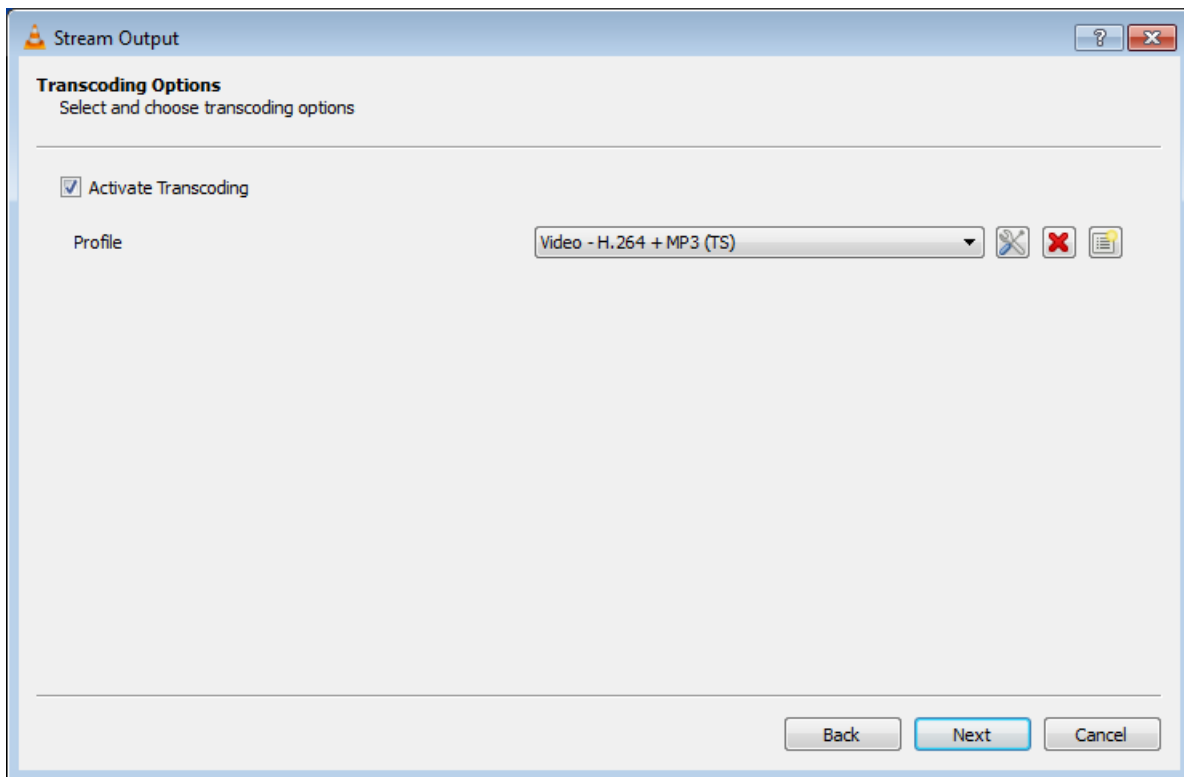### (1) Source: VLC Streaming Server (IP 239.0.0.5)

Pick UDP, and click "Add"

For multicast address, "239.0.0.5" is used for illustration. Then port "1234" is picked, and click "Next" button.
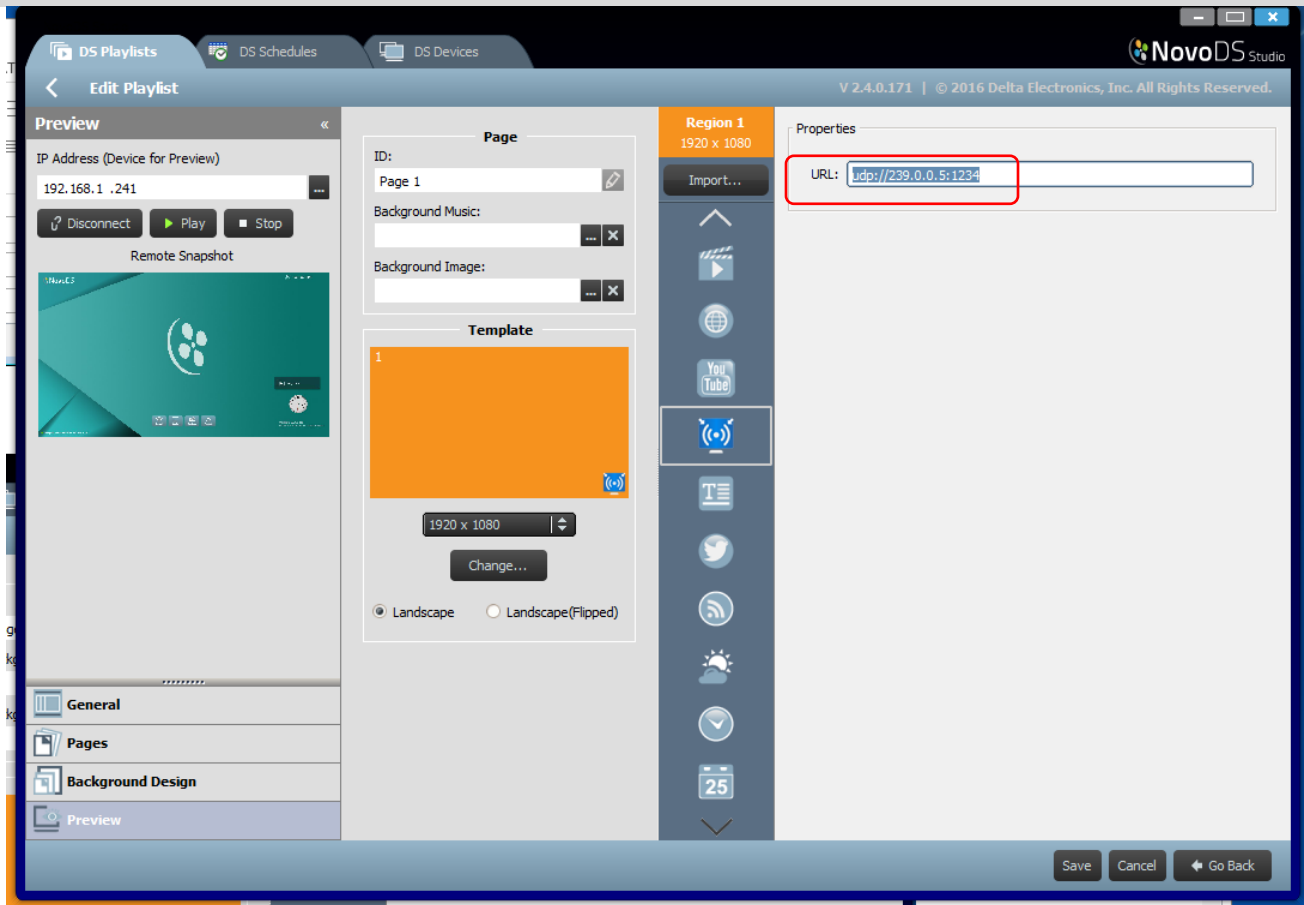
Make sure you select "Video – H.264 + MP3 (TS)" profile, and you already set to use original video and audio when you configure RTSP service. Then click "Next" and "Stream" buttons.
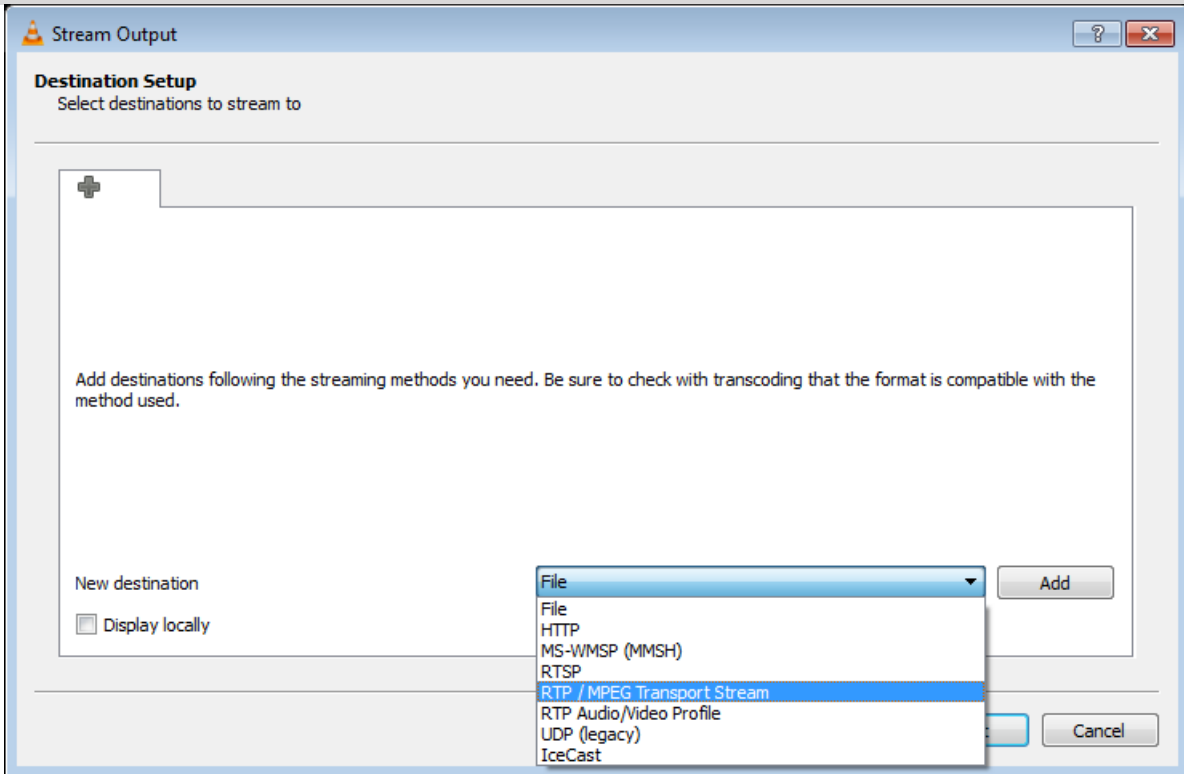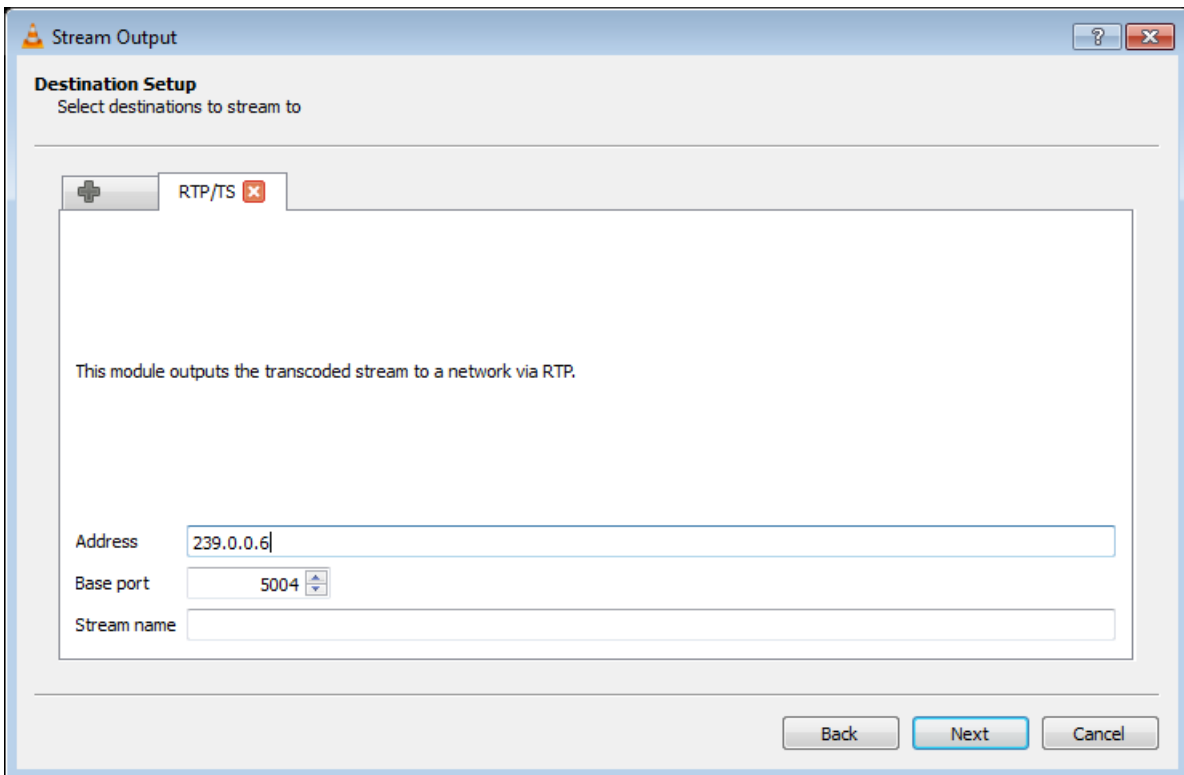

(2) Sink: NovoDS Setup

Enter "udp://239.0.0.5:1234" for the URL in NovoDS Studio software, as shown in the following figure. Please note that there is no "/" appended to the end of the URL.

3. RTP (MPEG Transport Stream)
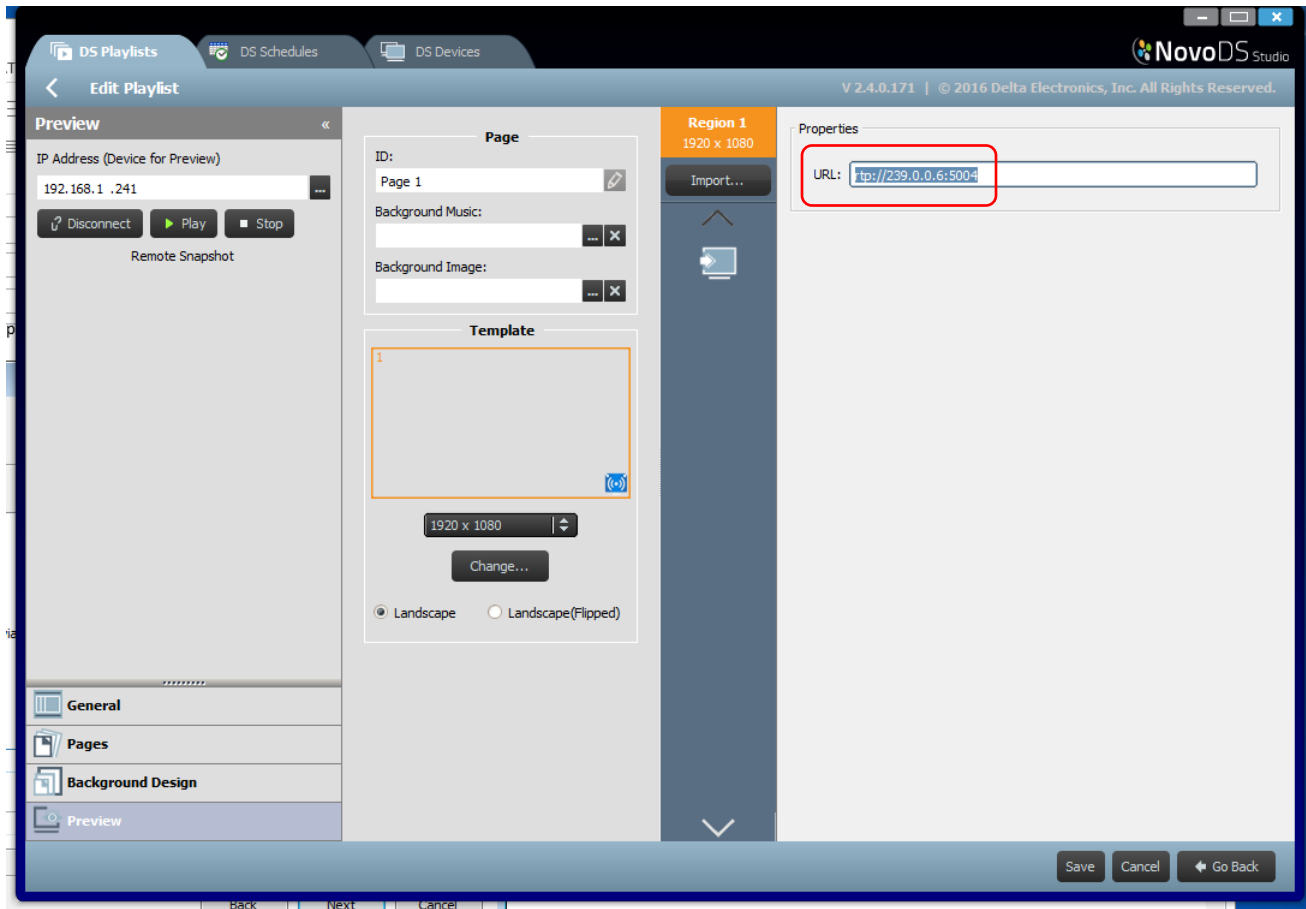
(1) Source: VLC Streaming Server (IP 239.0.0.6)

Type Multicast address, and "239.0.0.6" is used for this example. Make sure you select right Profile.

(2) Sink: NovoDS Setup

Enter "rtp://239.0.0.6:5004" for the URL in NovoDS Studio software, as shown in the following figure. Please note that there is no "/" appended to the end of the URL.

4.   HTTP and MMS

HTTP and MMS modes are similar to RTSP. For example, use http://192.168.1.79:8080 or mms://192.168.1.79:8080 as the URL in NovoDS Studio software.

The reason that port 8080 is used instead of the default port 80 is that port 80 could be used by Skype or other software installed on the VLC system.