

RTP Receiver:

Implemented in two ways:

1) Listen to destination address and play the media.

Simply create Player by calling Manager.createPlayer and specifying the RTP url.

2) Using ReceiveStreamListener and sessionListener and RTPManager.

GUI:

Two buttons : one to select audio-file address and other to select video-file address
ip_address and port-number is taken from user using dialog box

I am using two RTPManagers to listen to sessions and Receive stream events.

I am also setting the buffer size to 350.

Events:

SessionEvent:

This event occurs whenever new participant joins the port (sender in our case).

New ReceiveStreamEvent:

Get the data from the stream

Check if RTPcontrol is available for the data format

Check the sender of the data

Create player for the data stream

add player listener and realize the player

StreamMappedEvent:

This informs the participant (sender in our case) for the previously 'orphaned' stream.

ByeEvent:

it means that the sender has stopped data transmission.

close the player.

controllerEvent:

Realized event: indicates that the player is now realized and we can prefetch it.

PrefetchComplete event :

display the GUI (if any) for the player and start the player.

EndOfMediaEvent:

stop the player.

I have implemented an ActionListener to listen to button-pressed events.

When button is press, it opens dialog box to type the ip-address and port number of the server.

RTPServer:

GUI:

Contains 5 buttons:

Select media file

Select ip-address and port number

Start the media transmission

Pause/continue the media transmission

stop the media transmission

RTPServer class handles main RTP media transmission.

I am using Processor for the media. Just like a player, Processor also has events which is listened by extending controllerAdapter.

OutputFormat:

get tracks of the processor media.

If format is supported by the RTP then set that format.

Transmit media:

Again, I am using RTPManager to handle this. And processor is started, the RTPManager starts to send the data stream of the processor.

Pause/Continue/Stop :

These actions pause/continue/stop the processor, which in turn pause/restart the data transmission.

When data transmission is stopped, processor is closed and RTPManagers are disposed.