

11.3 Media reception using a MediaLocator

The simplest means to receive a RTP stream is to construct an appropriate MediaLocator object representing the stream. Then it is a straightforward means to construct a player out of this MediaLocator and playback the received media. You can use the program playerML.java or playerURL.java or playerDS.java given in the chapter on “Media Source”. Use the same “locatorString “ of the media destination used in the simpleTransmit.java as the locatorString for the playerML.java.

Example 11.2 given below illustrates how an applet can receive a RTP stream and playback the media. You should be able to understand this example after going through the chapter on “JMF Applet”. Try this program after finishing the chapter on "JMF Applet".

/ A simple RTP Player. You may use this program to receive the media transmitted using the program simpleTransmit.java. This idea used in this example is given in JMF API guide. The locatorString to be used in this program for the media reception should be the same as the locatorString of the media destination which you used in simpleTransmit.java Compile this file. Run appletviewer on rtpPlayer.html.*

**/*

```
import java.applet.*;
import java.awt.*;
import java.net.*;
import javax.media.*;
import javax.media.rtp.*;
```

```
public class rtpPlayer extends Applet implements ControllerListener {
    Player player = null;
```

```
    public void init() {
        setLayout(new BorderLayout());
        String url = "rtp://192.168.0.12:9000/video/1" ;

        try {
            MediaLocator mrl = new MediaLocator( url );
            player = Manager.createPlayer( mrl );
            player.addControllerListener(this);
        }catch (Exception e) {
            System.err.println("Got exception "+e);
        }
    }
```

```
    public void start() {
        player.start();
    }
```

```
    public void stop() {
        player.stop();
        player.deallocate();
    }
```

```
public void destroy() {
    player.close();
}
public synchronized void controllerUpdate(ControllerEvent event) {

    try{
        if (event instanceof RealizeCompleteEvent) {
            Component comp= null;
            if ((comp = player.getVisualComponent()) != null)
                add ("Center", comp);
            if ((comp = player.getControlPanelComponent()) != null)
                add ("South", comp);
            validate();
        }

    }catch ( Exception e ) {
        System.out.println( " Exception" + e );
    }
}
}
```

The following is the HTML file, which loads the class file of the above applet in a browser.

```
<html>
  <title>
    " The rtp Player"
  </title>
  <body>
    <applet code=rtpPlayer width=400 height=300 >
      " The rtp Player"
    </applet >
  </body>
</html>
```
