

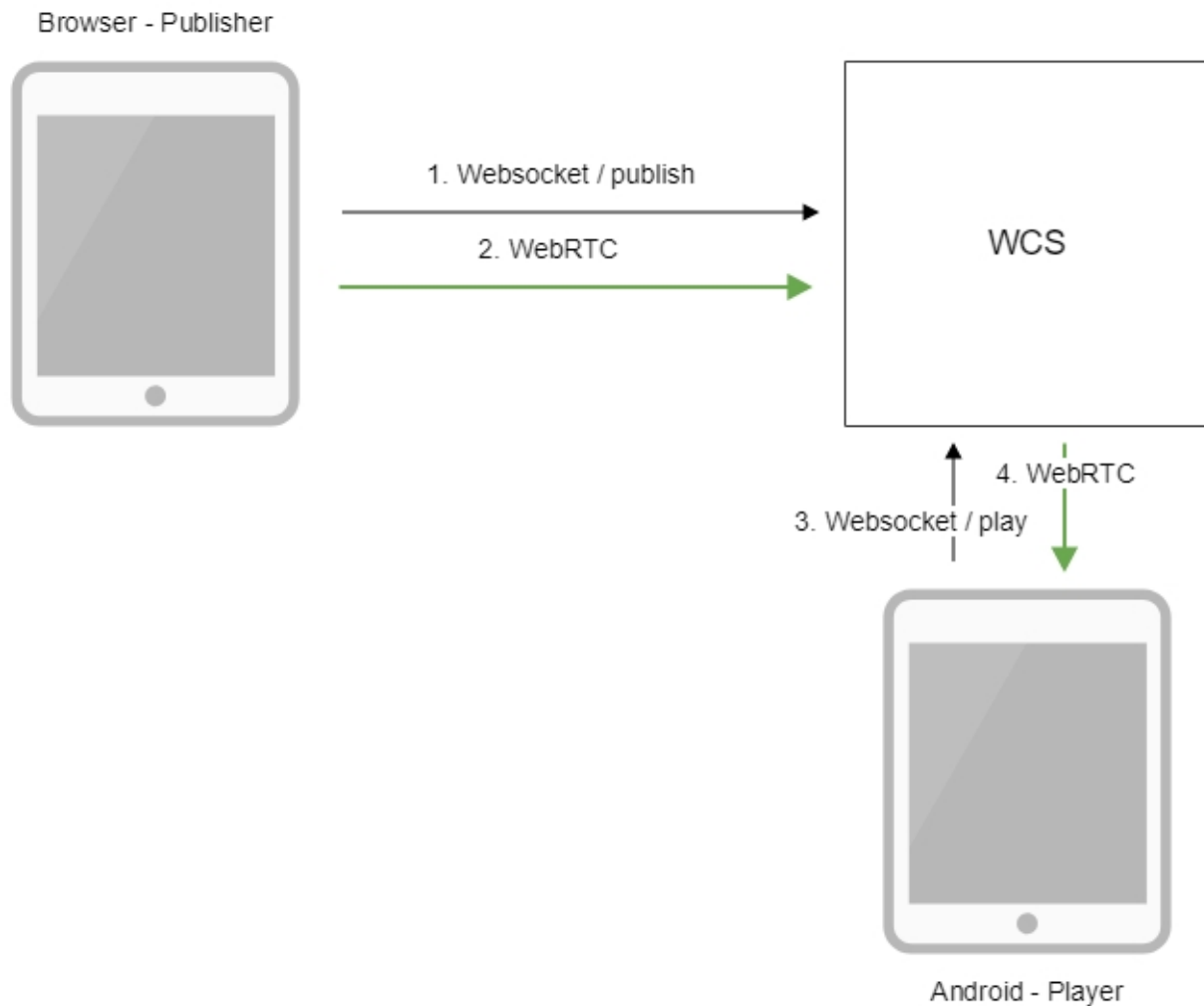
In an Android mobile application via WebRTC

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Overview

WCS provides SDK to develop client applications for the Android platform

Operation flowchart



1. The browser connects to the server via the Websocket protocol and sends the publish command.
2. The browser captures the microphone and the camera and sends the WebRTC stream to the server.
3. The Android device connects to the server via the Websocket protocol and sends the play command.
4. The Android device receives the WebRTC stream from the server and plays it in the application.

Quick manual on testing

Playing a video stream in an Android mobile application

1. For the test we use:

- the demo server at demo.flashphoner.com;
- the [Two Way Streaming](#) web application to publish the stream;
- the Player mobile application ([Google Play](#)) to play the stream

2. Open the Two Way Streaming web application. Click Connect, then Publish. Copy the identifier of the stream:

Two-way Streaming

Local



6c77 Stop

Player



6c77 Play Available

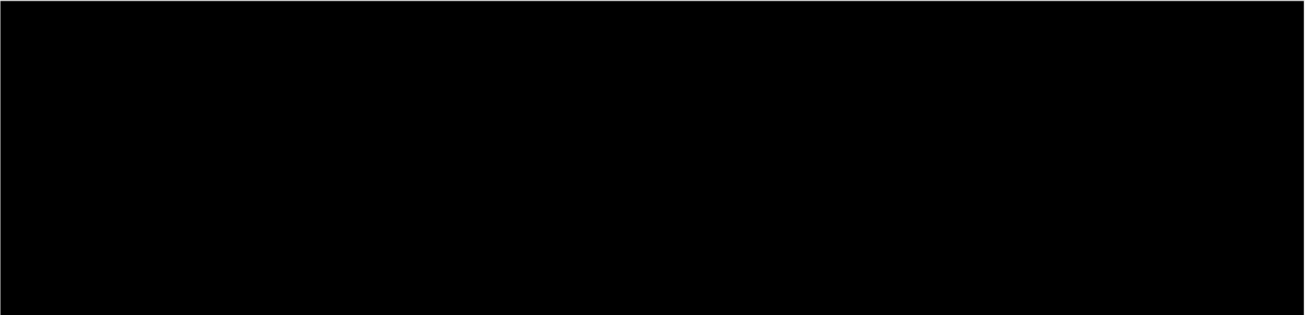
PUBLISHING

wss://demo.flashphoner.com:8443 Disconnect

ESTABLISHED

3. Install on the Android device the Player mobile app from [Google Play](#). Start the app on the device, and in the "WCS url" field enter the address of the WCS server as `wss://demo.flashphoner.com:8443`, in the "Play Stream" field - the identifier of the video stream:

Player



WCS Url

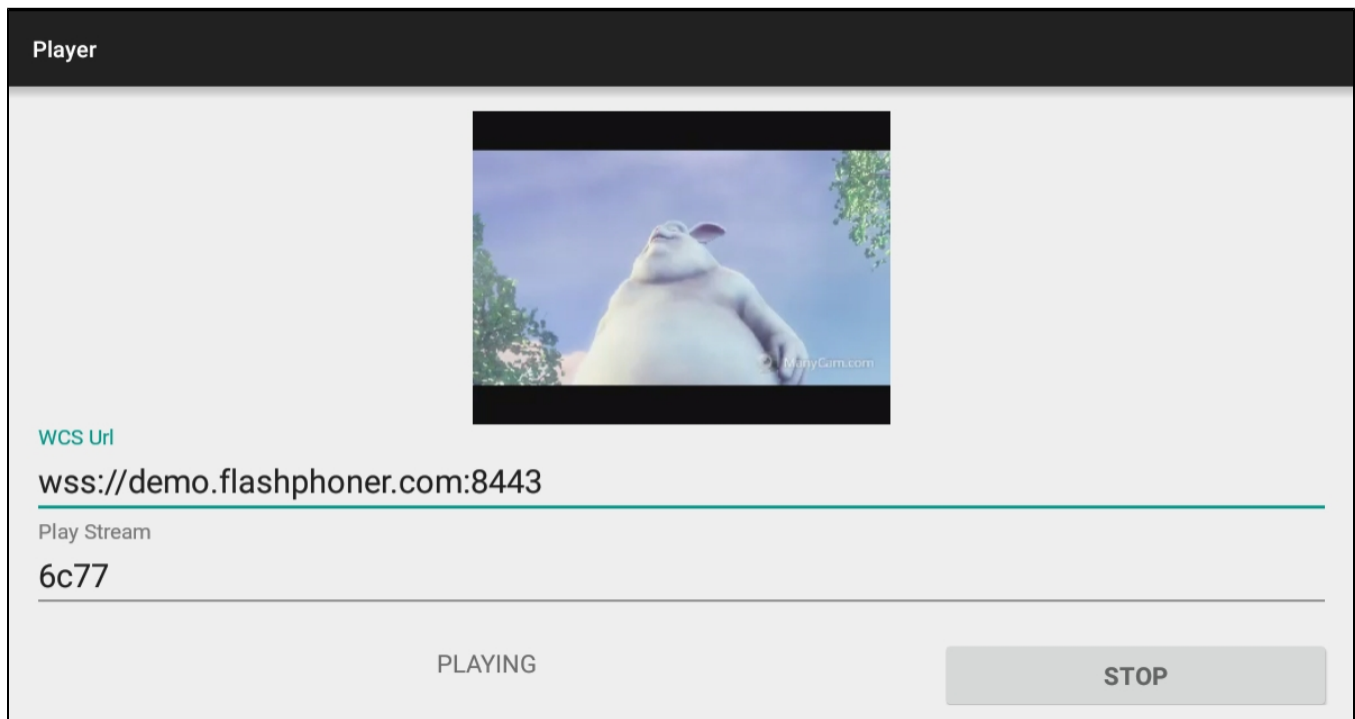
wss://demo.flashphoner.com:8443

Play Stream

6c77

START

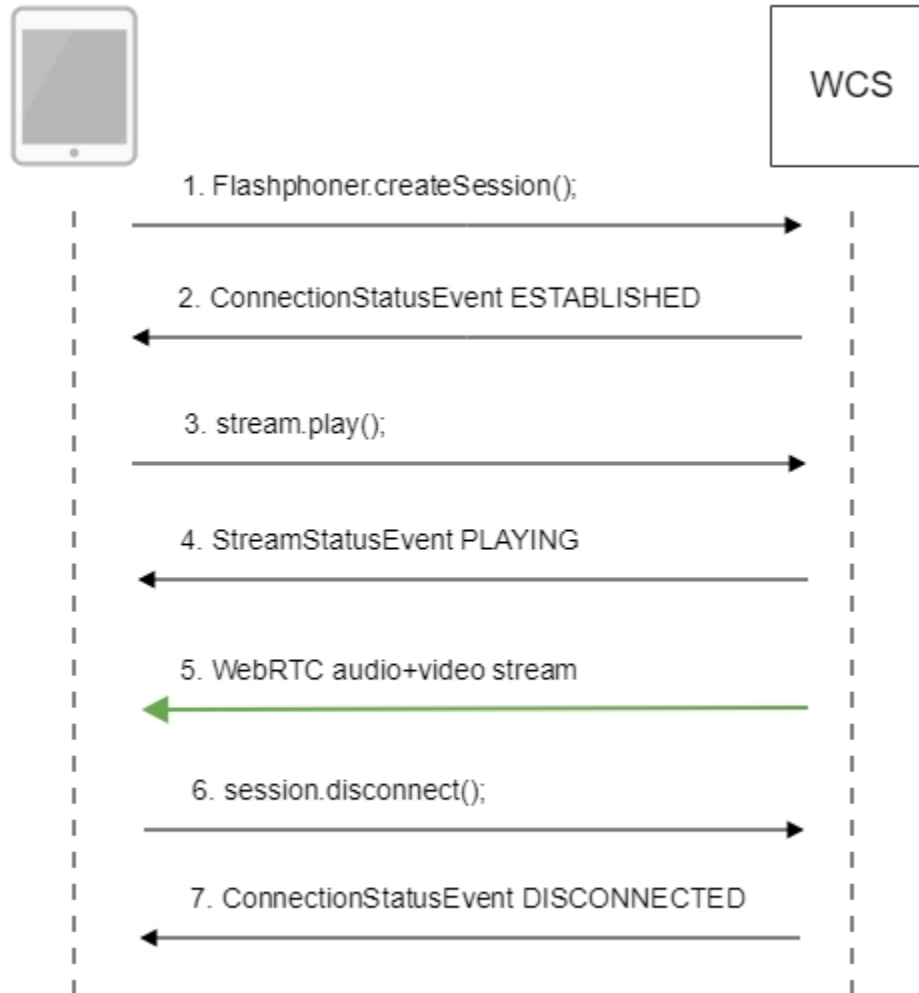
4. Click Start. The video stream starts playing.



Call flow

Below is the call flow when using the Player example to play the stream.

[PlayerActivity.java](#)



1. Establishing a connection to the server.

Flashphoner.createSession();[code](#)

```

/**
 * The options for connection session are set.
 * WCS server URL is passed when SessionOptions object is created.
 * SurfaceViewRenderer to be used to display the video stream is set with method
SessionOptions.setRemoteRenderer().
 */
SessionOptions sessionOptions = new SessionOptions(mWcsUrlView.getText().toString());
sessionOptions.setRemoteRenderer(remoteRender);

/**
 * Session for connection to WCS server is created with method createSession().
 */
session = Flashphoner.createSession(sessionOptions);

```

2. Receiving from the server an event that confirms successful connection.

ConnectionStatusEvent ESTABLISHED[code](#)

```

@Override
public void onConnected(final Connection connection) {
    runOnUiThread(new Runnable() {
        @Override
        public void run() {
            mStartButton.setText(R.string.action_stop);
            mStartButton.setTag(R.string.action_stop);
            mStartButton.setEnabled(true);
            mStatusView.setText(connection.getStatus());

            /**
             * The options for the stream to play are set.
             * The stream name is passed when StreamOptions object is created.
             */
            StreamOptions streamOptions = new StreamOptions(mPlayStreamView.getText().
toString());

            /**
             * Stream is created with method Session.createStream().
             */
            playStream = session.createStream(streamOptions);

```

3. Playing the stream.

stream.play();[code](#)

```

/**
 * Method Stream.play() is called to start playback of the stream.
 */
playStream.play();

```

4. Receiving from the server an event confirming successful playing of the stream.

StreamStatusEvent, status [PLAYING](#)[code](#)

