

Demonstration Publish & Subscribe Client App

Included in the LiveStreamCast (LCS) framework is a combination Publisher/Subscriber client app (P&S) provided and Sample Code, to demonstrate the FCPublish and FCSubscribe event notifications used by the LSC framework. Since the Speex codec is also demonstrated, P&S is targeted to Flash Player 10. The FLA is Flash CS3.

The screenshot displays the Adobe Flash Media Interactive Server interface for a live stream cast sample application. The interface is divided into several sections:

- Header:** "ADOBE FLASH MEDIA INTERACTIVE SERVER" and "LIVE STREAM CAST SAMPLE APPLICATION".
- Publish section:** Labeled "Publish server/app" with a "Close" button. It shows the URL "rtmp://localhost/livestreamcast_origin" and a video player displaying a hand.
- Subscribe section:** Labeled "Subscribe server/app" with a "Close" button. It shows the URL "rtmp://localhost/livestreamcast_edge" and a video player displaying the same hand.
- Stream Name:** A text box labeled "livestream1" with "stream nar" below it.
- Debug Console:** A central text area with a "clear debug" button and checkboxes for "Pub Debug" (unchecked) and "Sub Debug" (checked). It contains the following log output:

```
initSubStream  
[*** onFCSubscribe ***]  
[Subscribe clicked] = livestream1  
closeSubscribe  
[*** onFCUnsubscribe ***]  
[Subscribe clicked] = livestream1  
initSubStream  
[*** onFCSubscribe ***]  
NetStream.Play.Reset, Playing and resetting  
livestream1.  
NetStream.Play.Start, Started playing  
livestream1.  
NetStream.Buffer.Full, undefined
```
- Controls:** Includes "Stop" buttons, "time" displays (104 and 58), "publish.ns.Buffer=" (1) and "subscribe.ns.Buffer=" (1) fields, and radio buttons for "Nellymoser" and "Speex". A "Mic check: 0%" indicator and frequency selection buttons (44.1K hz, 22.05K hz, 11.025K hz, 16K hz, 8K hz, 5K hz) are also present.

Usage

There are two separate client sections within this app, Publisher and Subscriber, which can be used independently to demonstrate LCS functionality. While separate NetConnection URIs are present on the UI for OriginNode and EdgeNode connections, these share a single Netstream name.

- 1) Launch the app in a browser, depending on your Flash Player settings, you may be prompted to allow the Flash Player to use your local Camera and Microphone.
- 2) The Publish and Subscriber URIs default to `rtmp://localhost`, edit this to point your OriginNode and EdgeNodes as necessary.
- 3) If an A/V source is active, connected, and selected, the image (no audio) will show in the left-hand Publish section of the UI. The Subscriber image appears only when streaming is active.
- 4) From each [Connect] button, connect to each server. Check the Debug text area for status info.
- 5) On a successful NetConnection, the [Publish] and [Subscribe] buttons are enabled and selectable.
- 6) Once streaming is active, the video image and audio shows in the right hand Subscriber section of the UI.
- 7) During streaming, publish and subscribe netstream buffers can be changed on-the-fly.
- 8) During publishing, audio codecs and sample rates can be manipulated on-the-fly, with supported sample rate radio buttons enabled and disabled as necessary.