最简单的基于Flash的流媒体示例:网页播放器(HTTP, RTMP, HLS)

本文继续上一篇文章,记录一些基于Flash的流媒体处理的例子。本文记录一些基于Flash技术的网页播放器。基于Flash的网页播放器相比于其他网页播放器来说最大的优势就是"免插件安装"了,这一点可以很大的提高用户的体验质量。早些时候网络视频(尤其是直播)一般都使用ActiveX控件作为视频播放器,而这些控件并不普及,所以终端用户必须下载相关的插件才能收看节目,因而对很多不熟悉电脑的用户造成了很大的障碍。 直到Flash网页播放器的出现,这一障碍才得到了解决。本文将会记录几个常用的网页播放器,方便以后开发测试使用。



本文记录以下几种常用的网页播放器:

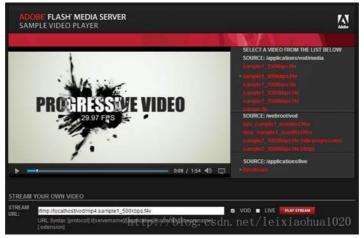
- rtmp_sample_player_adobe: 从Adobe Flash Media Sever提取出来的测试播放器
- rtmp_sample_player_wowza: 从Wowza服务器中提取出来的测试播放器
- rtmp_sample_player_flowplayer: 基于FlowPlayer的RTMP/HTTP播放器(添加RTMP plugin)
- rtmp_sample_player_videojs: 基于VideoJS的RTMP/HTTP播放器
- rtmp_sample_player_jwplayer: 基于JWplayer的RTMP/HTTP播放器
- hls_sample_player_flowplayer: 基于FlowPlayer的HLS播放器(添加HLS plugin)
- hls_video_player_html5: 基于HTML5的HLS/HTTP播放器
- activex_vlc_player: 基于VLC的ActiveX控件的播放器

RTMP Sample Player Adobe



RTMP Sample Player Adobe是从Adobe Flash Media Sever提取出来的测试播放器,平时测试使用非常方便,把测试的RTMP地址粘贴到下方的"Stream URL"里面,单击右侧红色的"Play Stream"就可以播放流媒体了。

RTMP Sample Player Adobe的截图如下所示。



RTMP Sample Player Wowza



RTMP Sample Player Wowza是从Wowza Streaming Engine中提取出来的测试播放器,平时测试使用也比较方便,将RTMP地址贴到对应的输入框中,单击"start"就可以播放流媒体了。

RTMP Sample Player Wowza的截图如下所示。

RTMP Sample Player Wowza

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RTMP Sample Player Flowplayer



FlowPlayer官网: http://flash.flowplayer.org/

注:FlowPlayer有两个版本:HTML5版本和Flash版本,本文中使用的是Flash版本。

RTMP Sample Player Flowplayer是基于FlowPlayer的网页播放器。其中包含两个播放器:

● Sample Player Flowplayer:HTTP点播网页播放器

• RTMP Sample Player Flowplayer: RTMP网页播放器

FlowPlayer原生支持HTTP点播,通过RTMP Plugin扩展之后支持RTMP。

Sample Player Flowplayer是支持HTTP点播的网页播放器,代码如下所示。

```
[html] 📳 🗿
1.
      <html>
2.
      <head>
3.
      <script type="text/javascript" src="flowplayer-3.2.8.min.js"></script>
4.
      <title>Sample Player FlowPlayer</title>
5.
      </head>
6.
7.
8.
      <body>
          <h1>Sample Player FlowPlayer</h1>
9.
10.
11.
12.
      Lei Xiaohua<br/>
13.
          <a href="http://blog.csdn.net/leixiaohua1020">http://blog.csdn.net/leixiaohua1020</a><br/>br/>
      leixiaohua1020@126.com
14.
15.
16.
      <!-- this A tag is where your Flowplayer will be placed. it can be anywhere -->
17.
18.
              href="http://video-js.zencoder.com/oceans-clip.mp4"
19.
               style="display:block;width:520px;height:330px"
20.
              id="player">
21.
22.
      <!-- this will install flowplayer inside previous A- tag. -->
23.
          <script>
      flowplayer("player", "flowplayer-3.2.8.swf");
24.
25.
          </script>
26.
27.
      </body>
28.
     </html>
```

播放器的效果如下图所示,图中正在播放的视频文件的URL为http://video-js.zencoder.com/oceans-clip.mp4

Sample Player FlowPlayer

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RTMP Sample Player Flowplayer是经过RTMP Plugin扩展之后的网页播放器,代码如下所示。

```
[html]
      <!DOCTYPE html>
2.
      <html>
3.
      <head>
4.
      <script type="text/javascript" src="flowplayer-3.2.8.min.js"></script>
5.
      <title>RTMP Sample Player FlowPlayer</title>
6.
7.
8.
9.
     <body>
10.
     <h1>RTMP Sample Player FlowPlayer</h1>
11.
12.
13.
         Lei Xiaohua<br/>
     14.
15.
         leixiaohua1020@126.com
16.
17.
         <!-- this A tag is where your Flowplayer will be placed. it can be anywhere -->
18.
19.
20.
              style="display:block;width:520px;height:330px"
21.
              id="player">
22.
23.
         <!-- this will install flowplayer inside previous A- tag. -->
24.
       <script>
25.
         flowplayer("player", "flowplayer-3.2.8.swf",{
26.
            clip: {
             url: 'hks',
provider: 'rtmp',
27.
28.
29.
               live: true,
30.
             plugins: {
31.
32.
33.
                 url: 'flowplayer.rtmp-3.2.8.swf',
34.
                 netConnectionUrl: 'rtmp://live.hkstv.hk.lxdns.com/live
35.
36.
           }
37.
         });
      </script>
38.
39.
40.
41.
42.
            Sample RTMP URL (Live) is "rtmp://live.hkstv.hk.lxdns.com/live/hks
43.
         44.
45.
      </body>
46.
     </html>
```

播放器的效果如下图所示,图中正在播放的视频的URL为rtmp://live.hkstv.hk.lxdns.com/live/hks

RTMP Sample Player FlowPlayer

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Sample RTMP URL (Live) is "rtmp://live.hkstv.hk.lxdns.com/live/hks" hua 1020

RTMP Sample Player VideoJS



Video.js官网: http://www.videojs.com/

RTMP Sample Player VideoJS是基于Video.js的RTMP播放器。其中包含两个播放器:

- Sample Player VideoJS: HTTP点播网页播放器
- RTMP Sample Player VideoJS: RTMP网页播放器

Sample Player VideoJS是支持HTTP点播的网页播放器,代码如下所示。

```
[html] 📳 📑
1.
      <!DOCTYPE html>
2.
       <html>
3.
      <head>
4.
        <title>Sample Player Videojs</title>
        <!-- Chang URLs to wherever Video.js files will be hosted -->
5.
6.
       <link href="video-js.css" rel="stylesheet" type="text/css">
        <!-- video.js must be in the <head> for older IEs to work. -->
7.
        <script src="video.js"></script>
8.
        <!-- Unless using the CDN hosted version, update the URL to the Flash SWF -->
9.
10.
       <script>
          videojs.options.flash.swf = "video-js.swf";
11.
12.
        </script>
13.
      </head>
14.
      <body>
15.
      <h1>Sample Player Videojs</h1>
16.
      Lei Xiaohua<br/>
17.
           <a href="http://blog.csdn.net/leixiaohua1020">http://blog.csdn.net/leixiaohua1020</a><br/>>br/>
18.
          leixiaohua1020@126.com
19.
        <video id="example video 1" class="video-js vjs-default-skin" controls preload="none" width="640" height="264"</pre>
         poster="http://video-js.zencoder.com/oceans-clip.png"
20.
21.
             data-setup="{}">
22.
          <source src="http://video-js.zencoder.com/oceans-clip.mp4" type='video/mp4' />
           <source src="http://video-js.zencoder.com/oceans-clip.webm" type='video/webm' />
23.
         <source src="http://video-js.zencoder.com/oceans-clip.ogv" type='video/ogg' />
24.
       <track kind="captions" src="demo.captions.vtt" srclang="en" label="English"></track>
  <track kind="subtitles" src="demo.captions.vtt" srclang="en" label="English"></track>
</track></track></track>
25.
26.
27.
           To view this video please enable JavaScript, and consider upgrading to a web browser that <a href="http://v</a>
      ideojs.com/html5-video-support/" target="_blank">supports HTML5 video</a>
28.
        </video>
29.
30.
31.
       </body>
      </html>
32.
```

播放器的效果如下图所示,图中正在播放的视频的URL为http://video-js.zencoder.com/oceans-clip.mp4

Sample Player Videojs

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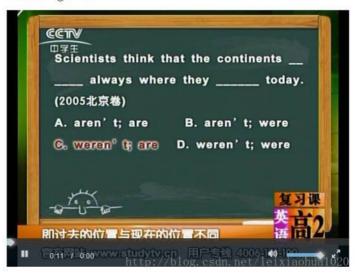
RTMP Sample Player VideoJS是支持RTMP的网页播放器,代码如下所示。

```
[html]
      <!DOCTYPE html>
2.
      <html>
3.
      <head>
4.
       <title>RTMP Sample Player Videojs</title>
        <!-- Chang URLs to wherever Video.js files will be hosted -->
5.
      <link href="video-js.css" rel="stylesheet" type="text/css">
6.
       <!-- video.js must be in the <head> for older IEs to work. -->
7.
      <script src="video.js"></script>
8.
       <!-- Unless using the CDN hosted version, update the URL to the Flash SWF -->
9.
10.
     <script>
         videojs.options.flash.swf = "video-js.swf";
11.
      </script>
12.
13.
      </head>
14.
      <body>
15.
      <h1>RTMP Sample Player Videojs</h1>
16.
      Lei Xiaohua<br/>
17.
          <a href="http://blog.csdn.net/leixiaohua1020">http://blog.csdn.net/leixiaohua1020</a><br/>>/a><br/>br/>
18.
      leixiaohua1020@126.com
19.
        <video id="example_video_1" class="video-js vjs-default-skin" controls preload="none" width="640" height="480" data-setup="{}">
20.
      <source src="rtmp://ams.studytv.cn/livepkgr/264" type="rtmp/flv"/>
21.
22.
         To view this video please enable JavaScript, and consider upgrading to a web browser that <a href="http://v">
      ideojs.com/html5-video-support/" target="_blank">supports HTML5 video</a>
23.
       </video>
24.
25.
      </body>
26.
27.
      </html>
```

播放器的效果如下图所示,图中正在播放的视频的URL为rtmp://ams.studytv.cn/livepkgr/264

RTMP Sample Player Videojs

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RTMP Sample Player JWPlayer



JW Player官网: http://www.jwplayer.com

注:最新版的JW Player似乎不能免费使用RTMP播放功能了,这里使用的是旧版的JW Player

RTMP Sample Player JWPlayer是基于JW Player的RTMP播放器。其中包含两个播放器:

- Sample Player JWPlayer: HTTP点播网页播放器
- RTMP Sample Player JWPlayer: RTMP网页播放器

Sample Player JWPlayer是支持HTTP点播的网页播放器,代码如下所示。

```
[html] 📳 👔
     <!DOCTYPE html>
1.
     <html xmlns="http://www.w3.org/1999/xhtml">
2.
3.
     <head>
4.
        <title>Sample Player JWPlayer</title>
5.
         <script type='text/javascript' src='jwplayer.js'></script>
6.
     <body>
8.
        <h1>Sample Player JWPlayer</h1>
9.
         Lei Xiaohua<br/>
10.
       11.
        leixiaohua1020@126.com
12.
         <div id='mediaspace'>This text will be replaced</div>
13.
       <script type='text/javascript'>
14.
15.
          {\tt jwplayer('mediaspace').setup(\{}
            'flashplayer': 'player.swf',
16.
            'file': 'sintel.mp4',
17.
            'controlbar': 'bottom',
18.
19.
            'width': '640',
            'height': '360'
20.
21.
          });
22.
        </script>
23.
24.
     </body>
     </html>
25.
```

播放器的效果如下图所示,图中正在播放的视频的URL为本地的sintel.mp4

Sample Player JWPlayer

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RTMP Sample Player JWPlayer是支持RTMP的网页播放器,代码如下所示。

```
[html] 📳 📑
      <!DOCTYPE html>
2.
      <html xmlns="http://www.w3.org/1999/xhtml">
3.
      <head>
4.
         <title>RTMP Sample Player JWPlayer</title>
5.
          <script type='text/javascript' src='jwplayer.js'></script>
6.
      </head>
7.
      <body>
8.
         <h1>RTMP Sample Player JWPlayer</h1>
9.
          Lei Xiaohua<br/>
      <a href="http://blog.csdn.net/leixiaohua1020">http://blog.csdn.net/leixiaohua1020</a><br/>><br/>>
10.
11.
          leixiaohua1020@126.com
12.
          <div id='mediaspace'>This text will be replaced</div>
13.
      <script type='text/javascript'>
14.
15.
            jwplayer('mediaspace').setup({
16.
              'flashplayer': 'player.swf',
17.
              'file': 'flv',
18.
             'streamer': 'rtmp://wx.cnrmall.com/live
19.
              'controlbar': 'bottom',
20.
             'width': '640',
21.
              'height': '360'
22.
         });
23.
          </script>
24.
         >
             Sample RTMP URL (Live) is "rtmp://wx.cnrmall.com/live/flv"
25.
26.
         27.
      </body>
28.
     </html>
```

播放器的效果如下图所示,图中正在播放的视频的URL为rtmp://wx.cnrmall.com/live/flv

RTMP Sample Player JWPlayer

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Sample RTMP URL (Live) is "rtmp://wx.cnrmail.com/live/fiv"dn. net/leixiaohua1020

HLS Sample Player Flowplayer

HLS Sample Player Flowplayer是增加了HLS Plugin扩展之后的FlowPlayer。增加了HLS Plugin之后,FlowPlayer增加了对HLS的支持。代码如下所示。

```
[html]
      <!DOCTYPE HTML>
2.
      <html>
3.
      <head>
4.
      <title>HLS Sample Player Flowplayer</title>
5.
      <script type="text/javascript" src="flowplayer-3.2.12.min.js"></script>
      <script type="text/javascript" src="flowplayer.ipad-3.2.12.min.js"></script>
6.
7.
      </head>
8.
9.
10.
      <body>
11.
      <h1>HLS Sample Player Flowplayer</h1>
12.
      Lei Xiaohua<br/>
13.
           <a href="http://blog.csdn.net/leixiaohua1020">http://blog.csdn.net/leixiaohua1020</a><br/>>/a><br/>/a><br/>/blog.csdn.net/leixiaohua1020</a>
14.
         leixiaohua1020@126.com
15.
      <!-- player container-->
16.
      <a style="display: block; width: 660px; height: 350px;" id="flashls_vod">
17.
18.
19.
20.
      <!-- Flowplayer installation and configuration -
21.
      <script type="text/javascript">
      flowplayer("flashls vod", "flowplayer.swf", {
22.
23.
           // configure the required plugins
24.
          plugins: {
25.
               flashls: {
                 url: 'flashlsFlowPlayer.swf',
26.
27.
              }
28.
       },
29.
           clip: {
              url: "http://stream.flowplayer.org/drive.m3u8",
30.
31.
               //url: "http://devimages.apple.com/iphone/samples/bipbop/bipbopall.m3u8",
32.
              //live: true,
33.
               urlResolvers: "flashls",
34.
              provider: "flashls"
35.
36.
      }).ipad();
37.
      </script>
38.
      >
39.
40.
41.
      42.
43.
44.
      </body>
45.
      </html>
```

播放器的效果如下图所示,图中正在播放的视频的URL为http://stream.flowplayer.org/drive.m3u8

HLS Sample Player Flowplayer

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HLS Video Player Html5



```
[html] 📳 📑
      <!DOCTYPE HTML>
2.
      <html>
3.
      <head>
4.
      <title>Video Player Html5</title>
5.
      </head>
6.
      <body>
      <h1>Video Player Html5</h1>
7.
      Lei Xiaohua<br/>
8.
          <a href="http://blog.csdn.net/leixiaohua1020">http://blog.csdn.net/leixiaohua1020</a><br/>br/>
9.
10.
         leixiaohua1020@126.com
      <video src="sintel.mp4" controls="controls">
11.
      your browser does not support the video tag
12.
13.
      </video>
14.
15.
16.
      </body>
17.
      </html>
```

在这里需要注意,<video>标签需要浏览器支持HTML。如果浏览器不支持HTML5的话,打开网页会显示如下信息。

Video Player Html5

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your browser does not support the video tagdn. net/leixiaohua1020

如果浏览器支持HTML5,打开网页的效果如下图所示。图中正在播放的视频的URL为sintel.mp4

Video Player Html5

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ActiveX VLC Player



ActiveX VLC Player与上述的网页播放器有很大的不同,主要用于对比。ActiveX VLC Player是基于ActiveX控件的播放器。基于ActiveX控件意味着只有IE支持该网页播放器,而且要求本机必须首先安装VLC。

由于有几乎"万能"的VLC Media Player做后盾,该网页播放器的性能是相当强的:不仅支持上文中提到的各种播放器支持的HTTP、RTMP、HLS,而且支持MMS、RT SP以及UDP这些协议(VLC Media Player支持的协议它都支持)。 ActiveX VLC Player源代码如下所示。

```
[html]
      <!DOCTYPE HTML>
2.
      <html>
3.
      <head>
4.
      <title>ActiveX VLC Player</title>
5.
      </head>
6.
      <body>
      <h1>ActiveX VLC Player</h1>
7.
8.
      Lei Xiaohua<br/>
      <!-- To run this demo you should install VLC first -->
9.
          <a href="http://blog.csdn.net/leixiaohua1020">http://blog.csdn.net/leixiaohua1020</a><br/>>br/>
10.
11.
          leixiaohua1020@126.com
      <OBJECT classid="clsid:9BE31822-FDAD-461B-AD51-BE1D1C159921"</pre>
12.
13.
          codebase="http://downloads.videolan.org/pub/videolan/vlc/latest/win32/axvlc.cab"
14.
             width="640" height="480" id="vlc" events="True">
       <!--<param name="Src" value="http://video-js.zencoder.com/oceans-clip.mp4" />-->
15.
      <!--<param name="Src" value="http://live.3gv.ifeng.com/live/CCTV13.m3u8" />-->
16.
17.
       <!--<param name="Src" value="rtmp://live.hkstv.hk.lxdns.com/live/hks" />-->
       <!--<param name="Src" value="mmst://media.shtv.net.cn/shtv" />-->
18.
19.
       <param name="Src" value="rtsp://58.248.254.7:9135/live/ds-mmzh.sdp" />
20.
21.
       <param name="ShowDisplay" value="True" />
       <param name="AutoLoop" value="False" />
22.
       <param name="AutoPlay" value="True" />
23.
24.
       </OBJECT>
25.
26.
      </body>
27.
28.
      </html>
```

播放器的效果如下图所示,图中正在播放的视频的URL为rtsp://58.248.254.7:9135/live/ds-mmzh.sdp

ActiveX VLC Player

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下载

Simplest flashmedia example

SourceForge: https://sourceforge.net/projects/simplestflashmediaexample/ Github: https://github.com/leixiaohua1020/simplest_flashmedia_example 开源中国: http://git.oschina.net/leixiaohua1020/simplest_flashmedia_example

CSDN下载: http://download.csdn.net/detail/leixiaohua1020/8456499

本工程包含如下基于Flash技术的流媒体的例子:

simplest_as3_rtmp_player: 最简单的RTMP播放器(基于ActionScript)simplest_as3_rtmp_streamer:最简单的RTMP推流器(基于ActionScript)rtmp_sample_player_adobe: 从Adobe Flash Media Sever提取出来的测试播放器rtmp_sample_player_wowza: 从Wowza服务器中提取出来的测试播放器rtmp_sample_player_flowplayer: 基于FlowPlayer的RTMP/HTTP播放器(添加RTMP plugin)rtmp_sample_player_videojs: 基于VideoJS的RTMP/HTTP播放器