环境准备

一.下载rtmp服务器 crtmpserver

https://github.com/j0sh/crtmpserver

编译安装有详细的步骤：

编译 :cd crtmpserver/builders/cmake cmake . （需安装cmake）

修改:crtmpserver.lua 配置中 mediaFolder的目录 (/mp4)并放入flv文件

运行:./crtmpserver/crtmpserver crtmpserver/crtmpserver.lua

运行成功如图：

```
+---+---------------+-----+-------------------------+-------------------------+
| c |      ip       | port|   protocol stack name   |     application name    |
+---+---------------+-----+-------------------------+-------------------------+
|tcp|        0.0.0.0| 1112|           inboundJsonCli|                    admin|
+---+---------------+-----+-------------------------+-------------------------+
|tcp|        0.0.0.0| 1935|             inboundRtmp|               appselector|
+---+---------------+-----+-------------------------+-------------------------+
|tcp|        0.0.0.0| 8081|            inboundRtmps|               appselector|
+---+---------------+-----+-------------------------+-------------------------+
|tcp|        0.0.0.0| 8080|            inboundRtmpt|               appselector|
+---+---------------+-----+-------------------------+-------------------------+
|tcp|        0.0.0.0| 6666|           inboundLiveFlv|               flvplayback|
+---+---------------+-----+-------------------------+-------------------------+
|tcp|        0.0.0.0| 9999|             inboundTcpTs|               flvplayback|
+---+---------------+-----+-------------------------+-------------------------+
|tcp|        0.0.0.0| 6665|           inboundLiveFlv|              proxypublish|
+---+---------------+-----+-------------------------+-------------------------+
|tcp|        0.0.0.0| 8989|        httpEchoProtocol|             samplefactory|
+---+---------------+-----+-------------------------+-------------------------+
|tcp|        0.0.0.0| 8988|            echoProtocol|             samplefactory|
+---+---------------+-----+-------------------------+-------------------------+
|tcp|        0.0.0.0| 1111|    inboundHttpXmlVariant|                   vptests|
+---+---------------+-----+-------------------------+-------------------------+
/work/crtmpserver-centosinit/sources/crtmpserver/src/crtmpserver.cpp:272 GO! GO! G
```

http://blog.csdn.net/

注意：crtmpserver提供的 JW Player 网页客户端 不能用了，估计是新版的jwpayer不支持了，后面使用新版的jwplayer客户端

二.网页客户端

jwplayer https://www.jwplayer.com/

需要邮箱注册，之后可以下载jwplayer-7.3.4.ZIP，还需要LICENSE KEY ：

iiL9xxalkP7di2nLZ3tPLw0NLBCHdHBe8i3QDQ==

DOWNLOADS

NAME	LICENSE KEY	VERSION	RELE
JW Player 7 (Self-Hosted)	iiL9xxalkP7di2nLZ3tPLw0NLBCHdHBe8i3QDQ== COPY	7.3.4	Feb. 26
JW Player 6 (Self-Hosted)	CCNQMP2usd2zEkg1d874cI9yvDhV9sBPDdoUBw== COPY	6.12	Feb. 25
Android SDK	Upgrade to download the Android SDK	2.1.1	Feb. 12
iOS SDK	Upgrade to download the iOS SDK	2.1.0	Feb. 2
Apple TV App	No license key is necessary for the Apple TV App	1.0	Feb 15

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编写网页客户端:保存为 testlive.html

```
<html>
<head>
<script src="/jwplayer.js"></script>
<script type="text/JavaScript">jwplayer.key="iiL9xxalkP7di2nLZ3tPLw0NLBCHdHBe8i3QDQ==";</script>
</head>

<body>
<div id='my-video'></div> <script type='text/javascript'>
  jwplayer('my-video').setup({
  file: 'rtmp://192.168.1.148/live/2',   #ip 为RTMP 服务器的IP live为rtmp服务器配置文件中的aliases或name; 2  为flv文件名  可以带后缀.flv
  width: '480',
  height: '270'         });
</script>
</body>
</html>
```

放入 jwplayer 目录下,并将整个jwplayer目录放入web服务器 目录

我这里使用nginx

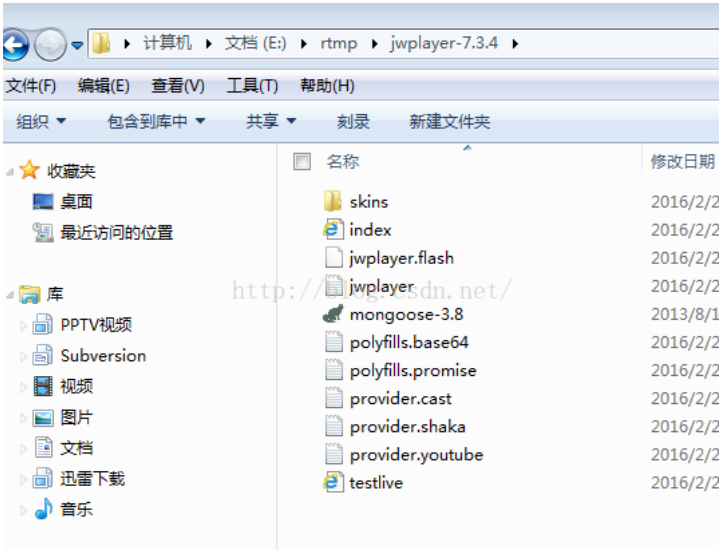
```
root@ubuntu:/usr/local/nginx/html/jw# ll
total 492
drwxr-xr-x 3 root root   4096 Feb 29 00:56 ./
drwxr-xr-x 3 root root   4096 Feb 26 02:10 ../
-rw-r--r-- 1 root root    520 Feb 26 02:16 index.html
-rw-rw-r-- 1 root root  95606 Feb 25 00:49 jwplayer.flash.swf
-rw-rw-r-- 1 root root 226776 Feb 25 00:49 jwplayer.js
-rw-rw-r-- 1 root root    874 Feb 25 00:49 polyfills.base64.js
-rw-rw-r-- 1 root root   2394 Feb 25 00:49 polyfills.promise.js
-rw-rw-r-- 1 root root  12461 Feb 25 00:49 provider.cast.js
-rw-rw-r-- 1 root root 118942 Feb 25 00:49 provider.shaka.js
-rw-rw-r-- 1 root root   5610 Feb 25 00:49 provider.youtube.js
drwxr-xr-x 2 root root   4096 Feb 26 02:08 skins/
-rw-r--r-- 1 root root    404 Feb 29 00:56 testlive.html
root@ubuntu:/usr/local/nginx/html/jw#
```

网页客户端依赖于WEB服务器 ， 所以需要下载WEB SERVER ， 随便哪个毒性

1. https://github.com/nginx/nginx

2. apache

3. mongoose（最方便 一个文件 运行即可）



三. PC客户端

vlc http://www.videolan.org/ 下载安装版

四：librtmp

http://rtmpdump.mplayerhq.hu/ 暂未测试

https://github.com/arut/nginx-rtmp-module 暂未测试