

**CONFIDENTIAL**



## **FLV Player Features**

**FLVPlayer04**

By **FLV Hosting**

Version: **0.0.2**

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## **1. Document Information**

### **1.1 Overview**

This document defines scope of FLV Player for FLVHosting.com and it defines the complete scope of the project. This document should be treated as master document in any confusion about requirements / features of the project.

### **1.2 Purpose**

Purpose of this document is to enlist features discussed and approved by FLVHosting.com to implement by Avinashi. This scope document will be treated as "Scope of the Work" for particular project.

### **1.3 Document URL**

Latest version of the document can be obtained from following URLs:

*Document Home:*  
(URL goes here)

*Document Versions:*  
(URL goes here)

*Document in Word Format:*  
(URL goes here)

*Document in PDF Format:*  
(URL goes here)

Note: You may require credentials to access these URLs.

### **1.4 Confidential Terms**

Payment terms are listed here

### **1.5 References**

<http://dev.flvhost.com/viewtopic.php?t=51>

## **2. Scope of the Document**

### **2.1 Scope**

Scope of the document will affect in following cases:

- Development of the Project
- Testing of the Project
- Final output of the Project
- Financial terms agreed

### **2.2 Abbreviations**

FCS	Flash Communication Server
FMS	Flash Media Server
Player	Flash Player inside Browser
IDE	Flash Authoring Environment
fps	Frames Per Second

### **2.3 Other Notes**

Here is the list of contact persons for different scope:

#### Contact Persons:

Technical	Team Member 1
Financial	Billing
Management	The Boss
Support	Team Member 2
Project (overall)	The Boss

#### FLVHosting:

Technical	xxx
Financial	xxx
Management	xxx
Support	xxx
UI	xxx
Server	xxx
Project	xxx

### **3. FLV Player**

#### **3.1 Draft Features**

Here is the list of features which we collected from reference URL given in client overview and notes.

##### **1. Skin Support**

The design of the player can be modified by inexperienced flashers simply by making graphic modifications to existing controls as follows:

- a) Pause / Play button
- b) Buffer bar and scrubber bar
- c) Mute button
- d) Logo which is clickable back to flvhosting.com
- e) Optional volume slider control that can be turned on inside the FLA.
- f) Resize button that enlarges the video to cover the stage and controls so only the video is shown and a button / text link to resize back to normal - respect aspect ratio of video when doing this and make the controls mc invisible as to never allow an expanded video to show controls while in full screen mode - which is the SWF stage size. There could possibly be an option to keep the controls over the video even after the full size is shown - if done this must be something set from within the FLA file or via flashvars.
- g) Total Time and Play head time obtained via metadata for progressive.
- h) For the future playlist player we will need next and back buttons to navigate the playlist due to an option that would show a playlist in a separate area on the stage to the right of the player or to not have that and use a built in playlist button that just pops up a menu to select from the array / list of videos and the third is the next and

back that can be used in either of the playlists I just described.

These controls are placed on the stage where-ever the designer sees fit as to allow complete control of the players design which allows for unlimited customizing of the players UI.

## **2. FLV File Configuration**

Users should be able to give FLV file configuration through flashvars technique in HTML code. (We may need to get other parameters also from flashvars like server ip, port etc.,)

### **Suggestions:**

If we will maintain a common database for all customers, who are hosting FLV files with us, we can give them client ID and FLV ID to them, which they will use in flashvars. This trick will enhance most possible RTMP Bandwidth hijacking.

## **3. AutoPlay Configuration**

Users should be able to set AutoPlay mode to on or off through flashvars and depending on this, FLV Player will start playing once desired initial buffering is completed. It should also have following supportive features:

- a) StartImage, will be flashvars parameter; which defines the image should be used if AutoPlay is off and waiting for user to click on it and then video will play.
- b) EndImage will be flashvars parameter; which defines the image should be used if AutoPlay is on or off and video finished playback of video and reached at the end.
- c) EndImageURL will be flashvars parameter; which defines the URL where user will be redirected when he will click on the EndImage at end of video. If this parameter is empty or not set then it should just auto rewind and play the video from start when user is clicking on EndImage.
- d) If no EndImageURL given, it should auto rewind the video to 1<sup>st</sup> frame and pause the video.

#### **4. *BufferTime Configuration***

BufferTime will be flashvars parameter and will be in terms of % of complete video length. So whatever value is assigned to this parameter that much % of total video length will be buffered first and then video can start playing. Also this much length of video will be buffered until video playback is not done.

If no value is given for this parameter then default value is 5%.

**Suggestion:** Normally FLVPlayers are using this value in seconds rather than %. It affects when video is having length more than 30 minutes and user connection is not having sufficient bandwidth.

#### **5. *Resize from Center***

If video size differs from the player's video area, then it should resize from center of the video area in FLV Player. And during this resizing the aspect ratio should remain same.

#### **6. *Timer***

Player should have Timer in its UI and which should show something like 00:00 / 00:00, that is (mm:ss out of mm:ss).

### **3.2 *Delivery***

Final Source code, FLA and Server Side FMS code will be provided by FLVHosting according to financial terms.

Source code should be such so it can help the FLVHosting team to build up new versions of FLV Player according to various clients requirements.