



TECHNICAL PAPER

Reference video player for mobile-ready websites

Brady Kroupa
Lead Computer Scientist, Mobile
Adobe Systems, Inc.

May, 2010

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SUMMARY

We created this reference video player to help you quickly add video to your mobile website. You can also use our source code as a starting point if you'd like to create your own video player. This document describes how to use and configure the reference video player to stream your content. The player can currently handle RTMP, HTTP, and progressive download feeds. The reference video player also supports multi-bitrate and DVR support depending on the back-end streaming server.

PREREQUISITES

- Publicly accessible web server to upload the video player and HTML files
- A mobile device with Adobe® Flash® Player 10.1 installed on it. Download and install Flash Player on your device by navigating to <http://www.adobe.com/go/getflashplayer> on your device's web browser.

REFERENCE VIDEO PLAYER WALKTHROUGH

After you download the [latest reference player](#) and unzip it to your Desktop folder, review some of the files in the unpacked ZIP file:

`deploy/` – folder containing everything you need to upload to your web server
`img/` – image asset folder (a good location for the poster image of your video)
`js/` – JavaScript folder, contains the [SWFObject JavaScript source](#)
`playlistMediaRSS.xml` – sample media playlist file to view a sequence of video clips; more details on this below
`referencePlayer.html` – the HTML file that contains the embedded video player
`swf/` – SWFs folder:
 `adobeSkin.swf` – SWF file providing the appearance, or chrome, to the video player
 `mobilePlayer.swf` – reference video player using the [Open Source Media Framework](#)
`video/` – folder containing sample video:
 `Adobe_Test_Video_H264_Baseline32_480x320_24fps_500k.f4v`
 for playback testing
`source/` – reference video player source code, including .fla, .as files, and other assets

Let's focus now on the contents of the `deploy` folder. The two most important files are `mobilePlayer.swf` and `referencePlayer.html`. The `mobilePlayer.swf` file is the reference video player that is embedded in the `referencePlayer.html` web page using the SWFObject JavaScript class.

To change the video player's video stream, all you have to do is tweak a `flashVar` in the `referencePlayer.html` file:

1. Open the `referencePlayer.html` file in a text editor.
2. Look for the `embedSWF` function.
3. Notice the `flashVars` variable. These variables are passed in to the embedded video player on web page load and control how the player looks, behaves, and what content it plays.

4. Notice the `mediaSourceURL` item in `flashVars`. This instructs the video player to play the source file: `../video/Adobe_Test_Video_H264_Baseline32_480x320_24fps_500k.f4v`.
5. Upload the `deploy` folder to a publicly accessible folder on your website.
6. Browse to that folder's URL + `referencePlayer.html`. For example, browse to: `http://www.yourwebsite.com/publicFolder/deploy/referencePlayer.html`
7. You should see an Adobe poster image and a triangle play button. Press the play button to start the video.
8. Assuming the test video worked, try out your own FLV or MP4 video source. Open up `referencePlayer.html` again and change the `mediaSourceURL` item to point to your own video source URL on a different website or on your web server.

Note: You must either fully qualify this path or make it relative to the `deploy/swf` folder. For example, the default relative path to local content in your video folder is something like: `../video/Adobe_Test_Video_H264_Baseline32_480x320_24fps_500k.f4v`
 A fully qualified path to an external website could be something like:
`http://www.yourwebsite.com/publicFolder/deploy/video/Adobe_Test_Video_H264_Baseline32_480x320_24fps_500k.f4v`

CUSTOMIZING THE REFERENCE VIDEO PLAYER

In the previous section, we changed only the `mediaSourceURL` parameter. Let's go through all the parameters that you can change. Note that all values must be enclosed in double quotes:

PARAMETER	DESCRIPTION	VALUES
<code>mediaSourceURL</code>	Location of video source. Use this field when you're playing a single video stream and the URL of the video stream does not change frequently.	Relative path to the <code>swf</code> folder or absolute URL.
<code>profilerEnabled</code>	Writes the combined audio / video average fps playback to screen when video playback is paused.	"true" or "false" Defaults to false.
<code>mediaPosterURL</code>	Location of image to display before playback and possibly at the end of playback. This is typically a still image of one of the frames in your video.	Relative path to the HTML page or absolute URL.
<code>playlistURL</code>	Location of MediaRSS feed file listing multiple video sources for playback. This will be described more in detail below. Use this option (instead of <code>mediaSourceURL</code>) if you're specifying multiple video streams or if the URL of the video changes frequently.	Relative path to the HTML page or absolute URL. This cannot be an empty string, so if unused, set to <code>null</code> with no double quotes.
<code>playerAutoPlay</code>	Starts playback immediately when page is loaded.	"true" or "false" Defaults to false.
<code>playerAllowInlinePlay</code>	Permits playback to continue while not in full-screen mode.	"true" or "false" Defaults to false.
<code>playerOnEndExitFullScreen</code>	Exits full-screen mode when playback completes.	"true" or "false" Defaults to false.
<code>playerOnEndShowPoster</code>	Displays the media poster when the video has completed playback.	"true" or "false" Defaults to false.
<code>skinURL</code>	Location of the SWF which contains the UI assets. This will be described more in detail below.	Relative path to the HTML page or absolute URL.
<code>loggerURL</code>	An HTTP service to log debug messages to (accepts POST message, name, and level)	Absolute URL.

CREATING AN RSS PLAYLIST

If your video content updates regularly, consider using an RSS media playlist as your video source. The video that is shown to the user is based on the RSS feed when new videos become available.

We've provided a sample Media RSS file, `playlistMediaRSS.xml`. You can change the values to reflect your own content or set the `playlistURL` to point to your syndicated content. If you're using the `playlistURL`, you don't need to have the `mediaSourceURL` flashvar. For more information on the Media RSS format, please visit video.search.yahoo.com/mrss.

CREATING A VIDEO PLAYER SKIN

The following directions describe how to create your own video player skin based on the one provided in the reference video player ZIP file:

1. Copy `source/assets/flash/adobeSkin.fla`.
2. Open your copy of `adobeSkin.fla` in Adobe Flash® Professional.
3. In the FLA file there are a number of images that you can replace with your own similar bitmaps or vector graphics. These can be found in the `Library imgs` folder.
4. Publish the SWF and give it a new name, for example **mySkin.swf**, and upload this file into the `http://www.yourwebsite.com/publicFolder/deploy/swf/` folder on your website.
5. Update the `skinURL` flashVar in the `referencePlayer.html` file to be **swf/mySkin.swf**.
6. Upload the modified `referencePlayer.html` to your website, overwriting the copy that was previously there—here, for example:
`http://www.yourwebsite.com/publicFolder/deploy`
7. Clear the browser's cache, reload `referencePlayer.html` in the browser, and you should see your new changes.

TROUBLESHOOTING

If your video isn't visible or playing, there are few things you can do to troubleshoot. First, make sure all your paths are correct in the `flashVars`. Next, make sure the `flashVars` values are valid types.

If you are running tests of local videos and images without the use of a web server, you may have to [adjust your local Flash Player security settings](#) by doing the following:

1. Select Edit locations.
2. Select Add location.
3. Select Browse for files.
4. Select the `mediaplayer.swf` file from the download.



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