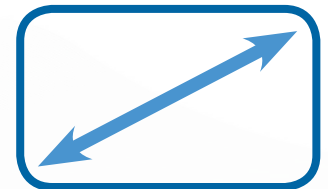


Video Considerations:

Video intended for delivery to mobile devices (iPhone, iPads, iPod Touch, Android phones and tablets, Blackberry phones) have some special requirements. Mobile devices tend to have much smaller screens and weaker processors than desktop machines, so they need to be fed video streams that they can handle.

Frame Size:

While a large HD stream can look very nice on a desktop display, that same stream will overwhelm most mobile devices. You should determine the minimum frame size that will allow a decent display on handheld devices, and make a stream available at that frame size. We have found that a 480x360 frame size works nicely for iPhones, while some of the smaller Blackberry devices need a frame size of 240x180.



Bit Rate:

Handheld devices are also limited in the bitrate they can handle. While some handhelds can handle full-speed 4G streams, others are limited to lower 3G rates. We therefore recommend delivering iPhone streams at 200 Kbps, and Blackberry streams at 100 Kbps.



Codecs:

Codecs are software components that allow encoding software to process video streams into binary formats compatible with players, and allows players to reform a binary stream into a video presentation. We must insure that the codecs used by our encoding software is compatible with the decoders available on our target platforms.

iPhone and Other Apple Products:

Apple devices require that video streams be encoded with the H.264 codec (available in recent versions of Flash Media Live Encoder), set for Baseline Profile, level 3.0. These are selected in Flash Media Live Encoder by clicking the wrench icon to the right of the "Video Format" selection window. Apple devices will recognize either MP3 or AAC audio streams.



Android and Blackberry:

Android and Blackberry video codec requirements are very similar to those of the iPhone devices. H.264, Baseline profile, level 3.0 as required by Apple devices will also work well with Android and Blackberry devices. Where Android and Blackberry devices differ from Apple devices is in audio codec requirements. These devices require the AAC audio codec. This codec is not a standard part of the Flash Media Live Encoder (FMLE). If your intention is to use FMLE to stream live to Android and Blackberry devices, you will need to purchase the Adobe Encode AAC plugin from MainConcept, or use an alternate encoding package.



BlackBerry

Encoders:

Flash Media Live Encoder is the most widely used encoding software, and is the one we reference in our tutorial material. Other software, such as Wirecast or VidBlaster can be used instead. Most of the other encoding packages available also include the AAC audio codec, so you would not have to purchase any additional codecs.