

Fact Sheet

Swift Create video requirements



Video format requirements for Swift Create

Swift Create requires browse quality video in order to caption against, ideally these should be encoded to PAL DVD – 384 x 288, NTSC – 320x240 or similar size.

Note that files encoded in resolutions larger than 640 pixels results in wasted space and could generate slow responses, generally speaking captioning/subtitling does not require High Definition video source.

Although higher instances of keyframes increase file size, they facilitate frame accuracy in compressed media. With Swift Create, keyframe can be a minimum of every 6 seconds, however every 1 second is recommended.

All clips should be encoded with constant bit rate, usually around 600Kbps, and must have a video stream, audio stream and ideally an encoded timecode (usually VITC or LTC).

Codecs

Many codecs are available, but in Softel's experience the most common Swift Create supported codecs are:

- **AVI** - reported as encoded with mpg4 video and ms audio codec
- **MPEG1** - reported as encoded with mpgv video and mpga audio codecs and played via Softel Create protocol (IPV encoded versions require all buddy files for the IPV option)
- **MPEG4** - reported as encoded with avc1 video and mp4a audio codec (IPV encoded versions require all buddy files).
- **WMV** - reported as encoded with wmv3 video and wma2 or wmap audio codecs (IPV encoded versions require all buddy files)
- **Quicktime (mov)** - reported as encoded with avc1 video and mp4a audio codec or SVQ3 video and QDM2 audio (23.97, 24, 25, 30 & 30 drop(29.97) fps rates are supported)
- MPEG2 is not supported - these files should be transcoded to .wmv
- H.264, MJPEG (MotionJPEG) and DiVX codecs are not supported

PC requirements

Swift Create requires a PC with a minimum specification of a 2.8GHz (single core) or equivalent Intel Core2 Duo processor and at least 1GB of memory to give good response for handling the vfs frames.

The video window is more specific to the graphics chipset, which must be able to handle Overlay and/or Direct3D. The latest chipset drivers should be installed.

Quicktime specific requirements

For Quicktime clips you should install Quicktime Player version 7 or greater. The graphics chipset requirements for Quicktime are more specific and it must be able to generate an overlay surface not necessarily to the dimensions of the power of 2. A recent chipset that will handle this is ATI Radeon X550.

Many 'express' chipsets as used in Desktop PC on-board graphic systems, or express mobility chipsets as used in laptops do not fully support playback of Quicktime clips. Intel Mobile 945GM Express with GMA950 chipset can support Quicktime, however Swift Create users have reported issues with other clips when using this chipset. There have also been instances of reported issues with Via based cards.

Softel do not recommend the use of 'netbook' type PCs, as they do not support frame by frame video analysis.

Audio

Higher sample and bit-rates produce higher quality audio, making it easier for the subtitler to hear the dialogue, as a guide 44,100 samples per second (44KHz) at 16-bits is 'CD' quality.

Swift Create supports most audio bitrates, including 'broadcast quality' such as 48KHz sample rate. If using MPEG Layer 3 (MP3) compression, the use of 48,000 samples/sec Stereo, 128 kbits/sec encoding, with a compression rate of 12.0:1 is recommended.

The Softel end-to-end subtitle solution

The Swift family of subtitling products from Softel provides a seamlessly integrated, end-to-end subtitling/captioning solution including off-line or time-of-air insertion, transmission and monitoring. Contact Softel to find out more or visit our website at www.softelgroup.com.

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