This page provides information and specifications that are important for you to understand before preparing your video for upload.

What format do I use to upload my entry? There are many different video containers, codecs and formats out there. These add up to literally thousands of different combinations. While we do our best to support as many formats as possible, we simply cannot ensure that any uploaded video will work.

1. **Transcoding Overview** - http://www.longtailvideo.com/support/blog/12633/an-overview-of-audio-and-video-transcoding
2. **Transcoding Best Practices** - http://www.longtailvideo.com/support/blog/13898/transcoding-best-practices
3. **File Type –** Here is a list of video formats we do support:
    - FLV - (VP6 and Sorenson Spark)
    - MPEG-4 (mp4, 3ivx, DivX, Xvid, H264)
    - wmv (WMV, WMV2, MSMPEG,VC-1)
    - MOV - Quicktime MPEG-4 (Sorenson Video 3, H263, H264, animation)
    - DV and DVCPro
    - MPEG1 and MPEG2
    - AVI (Indeo, Cinepak, Motion JPEG, MPEG)
    - F4V (H264)
4. Since we use the FFMPEG framework for transcoding videos, all other formats supported by FFMPEG can be uploaded too.

5. A few formats we occasionally encounter, but NOT supported are:

    - Quicktime (MOV) files that use the Apple ProRes codec (part of Final Cut). This codec also produces extremely large files. We advise to do a rough export from Final Cut Pro.
    - Quicktime (MOV) files that actually only contain a raw DV stream (some DV cameras export these). Export these files using either raw DV or H264/AAC Quicktime.
    - Quicktime (MOV) files with 24-bit audio.
    - DRM protected files from Microsoft (WMV) or the iTunes Store (M4V, MOV).
    - CSS encrypted DVD images (VOB).
    - WMV videos using the MSS2 video codec (for screencasting)
6. **The following are some video editing applications supported by the FLV Export plug-in:**
    - Adobe After Effects (Windows and Macintosh)
    - Adobe Premiere Pro (Windows andMacintosh)
    - Apple Final Cut Pro (Macintosh)
    - Apple QuickTime Pro (Windows and Macintosh)
    - Avid Xpress DV (Windows and Macintosh)
7. **Video Codec -** if you are not using video editing equipment, there are several programs that will convert your file using the recommended CODECs:
    - H.264 - MPEG 4/AVC (MPEG 4 Part 10)
    - VP6 - TrueMotion by On2.com

    Older CODECs can also be used but don't provide the same quality / compression levels.

    - MPEG-4 ASP
    - Sorenson H.263.

    Tools for Encoding (transcoding): There are many tools available. The links below are for a few that are worth evaluation:

- Free MP4 Encoder - http://www.erightsoft.net/SUPER.html and download site http://www.videohelp.com/tools/SUPER
- Free MP4 Encoder - Handbrake http://handbrake.fr/
- A web based encoding service called HeyWatch that offers pay-as-you-go encoding for $1.50 to $2 per GB - http://heywatch.com/
- A web based encoding service called Zencoder that offers pay-as-you-go encoding at a 5 cents per minute rate -http://zencoder.com/
- A web based encoding service called Encoding.com that offers pay-as-you-go encoding at reasonable prices -http://www.encoding.com/
- A web based encoding service called HDcloud.com that offers encoding - http://hdcloud.com/

Resources for Encoding: Following are some articles on encoding best practices:

- Two part article on encoding practices - http://digitalcontentproducer.com/videoencodvd/revfeat/encoding_best_practices_0609/ http://digitalcontentproducer.com/videoencodvd/revfeat/encoding_best_practices_0623/
- Tutorial on video compression - http://www.longtailvideo.com/support/jw-player/26/web-video-compression

Desktop Flash video players::

- Adobe Media Player
- Moyea FLV Player

8. **Originals Please! -** The less a video is re-encoded prior to uploading, the better the resulting video quality. We encourage you to upload your videos as close to the original source format as possible, with a minimum of intermediate re-encoding steps. Each re-encoding can generally degrade the quality of your video and create some specific problems too.

9. **File Size –** For ease of uploading, it is recommended that your video not have a file size greater than **500MB total**. Files larger than 500MB are likely to time out during upload. If you have a strong and steady internet connection for video uploads, you might not have any issues, but if you do have problems, you will need to look at the file size and your internet connection/speed. **Fast internet browsing does not mean that you have a strong and steady enough connection for video uploading.**

10. **Video Scale (Dimensions)** - The video player will have a 480x360 (4:3 Aspect Ratio) video display area. If the video is smaller in size, it will be centered within the player video area. If the video is larger, the encoding process will resize the video.

11. **Aspect Ratio** - The player uses 4:3 aspect ratio. 16:9 aspect ratio video will be letterboxed in the player.

- The aspect ratio of the original source video should always be maintained when it's uploaded: Uploaded videos should never include letterboxing or pillarboxing bars. The player automatically adds black bars so that videos are displayed correctly without cropping or stretching, whatever the size of the video or the player.
- If letterboxing is added to a video before it is uploaded (to create a 4:3 video from a 16:9 master for example), the widescreen player will add pillarbox bars too, resulting in black bars all around the video (windowboxing) and a bad viewing experience.

12. **Frame Rate** - The number of frames per second should not be less than 24. It is recommended that the frame rate be 29.97 or 30 frames per second to provide the best quality possible.

13. **Video Bitrate** - The recommendation is a bitrate of 700kbps if this allows enough compression to meet the file size limitation. Two-pass video encoding can help reduce file size and keep an overall higher bitrate. It is recommended to not go below 400kbps if possible. Use the Adobe bitrate calculator

14. **Audio Sampling Frequency** - It is recommended not to use less than 22,050.

15. **Audio Bitrate** - It is recommended not to use less than 64kbps.

16. **Audio CODEC** - AAC (higher quality) or MP3 are the recommended choices.

How long will it take to upload my video entry: Processing time varies greatly depending on your internet connection speed and file size. This could take anywhere from a few minutes for small videos to more than an hour for long videos. Please follow the recommended specifications to insure your video entry is uploaded properly.