Video Format

We support nearly any video format for uploading. Examples are 3GP, AVI, FLV, MOV, MP4 and WMV. There are a few noteworthy formats that are not supported:

- Quicktime (MOV) files that use the Apple Intermediate Codec (used in Final Cut Pro).
- DRM protected files from Microsoft (WMV) or the iTunes Store (M4V, MOV).
- WMV videos using the MSS2 video codec (for screencasting).
- Videos generated by GoToMeeting.

If you are in control of the format (e.g. when exporting the video from your editor), we advise you to always upload videos using:

- The MP4 container format
- The H.264 video codec
- The AAC audio codec

MP4 with H.264/AAC is a ubiquitous format these days. All widely used editing, compositing, screen-casting and transcoding tools support it. If your tools do not, take a look at Handbrake, a free but powerful desktop transcoder.

Dimensions & Bitrates

In terms of dimensions, bigger is better. Video in 720p is today's standard and a great option. We also see an increase in 1080p uploads. If your original video is full HD, we suggest you upload 1080p too. If your source footage is standard definition (NTSC, PAL), we suggest 360p as the dimension to use. Anything smaller than 360p is not recommended.

Since H.264 and AAC are excellent codecs, the upload bitrates do not have to be extremely high.

They should be sufficiently high to not introduce any data loss though. Remember that JW Platform creates the final encodes to be streamed. If the input format already has compression artifacts, the final transcodes may look quite bad.

Here is an overview that includes the preferred format, dimensions and audio/video bitrates to use. If you upload video in these formats, JW Platform will be able to build high quality transcodes and deliver smooth playback across devices.

	1080p	720p	360p
Dimensions	1920x1080 p	1280x720 p	640x360 p
Video bitrate	15,000 kbps	10,000 kbps	5,000 kbps
Audio bitrate	256 kbps	256 kbps	256 kbps

Note that our built-in transcoding will generate smaller versions of your uploaded video. If you upload video in 1080p, only viewers whose device and connection support 1080p playback will see that resolution. Other viewers (e.g. on older computers or phones) will see lower resolution transcodes (e.g. 360p or 180p).

Additional Settings

There are many more settings associated with video encoding. Here are some additional suggestions to follow when exporting your video for upload:

- Use progressive frames (e.g. 720p) instead of interlacing (e.g. 720i). Interlacing does not apply to online video and JW Platform will introduce artifacts when attempting to filter it away.
- Use a screen aspect ratio of 16:9. This will fill the screen of many monitors, laptops, tablets and phones with your footage. More rectangular (4:3) or cinematic (2.39:1) ratios will result in black borders on many screens.
- Use a pixel aspect ratio of 1:1. Older broadcast formats (like PAL or NTSC) use non-square pixels, but online video pixels are always square. JW Platform may have troubles converting non-square pixel aspect ratios, resulting in a stretched image.
- Export the to-be-uploaded videos in MP4 format and not in MOV. The latter contains additional features like Edit Lists that often result in audio-video sync issues.
- If available, select the Main or High profile for the H.264 video. These profiles support features like B-frames and CABAC, resulting in higher quality at the same bitrate.