Here are some notes on how to compress your videos without losing quality. Note that I use a Mac, and settings and specific terms may vary on a PC.
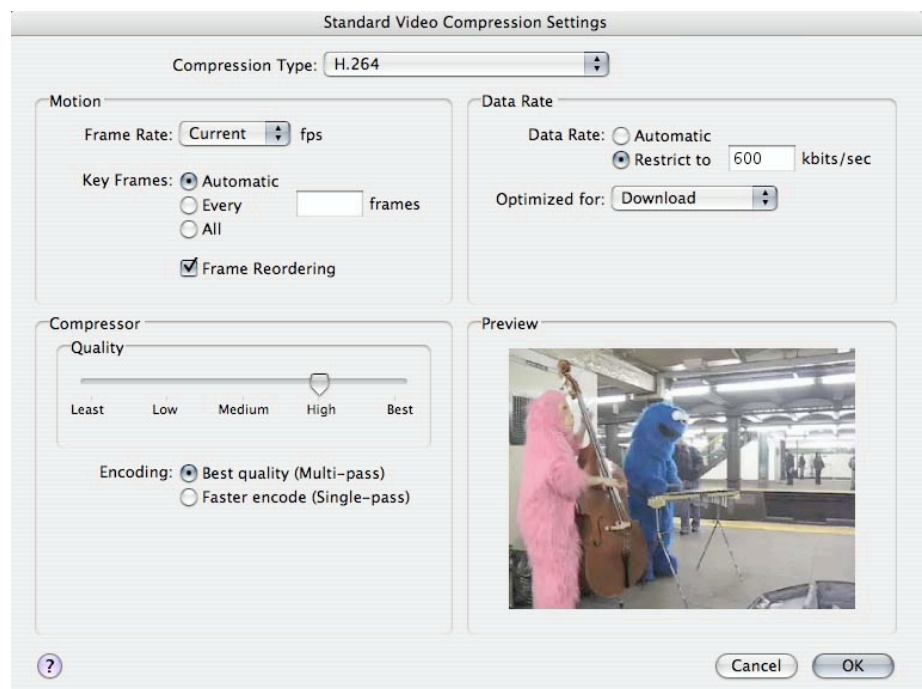
- Open video in QuickTime, Go to *File* > *Export* (NOT Export for Web) or
- In FCE use *Export* > *Using Quicktime conversion*
- At the bottom, it should say *"Export: Movie to QuickTime Movie"* and *"Use: Most Recent Settings"*
- Then you have to go under *"Options"* or a similarly named button next to it to actually change those "Most Recent Settings," which are likely set to default and are not typically helpful
- Make sure all three check boxes on "video, sound, prepare for Internet streaming" are checked, but then proceed into each section to change certain settings.
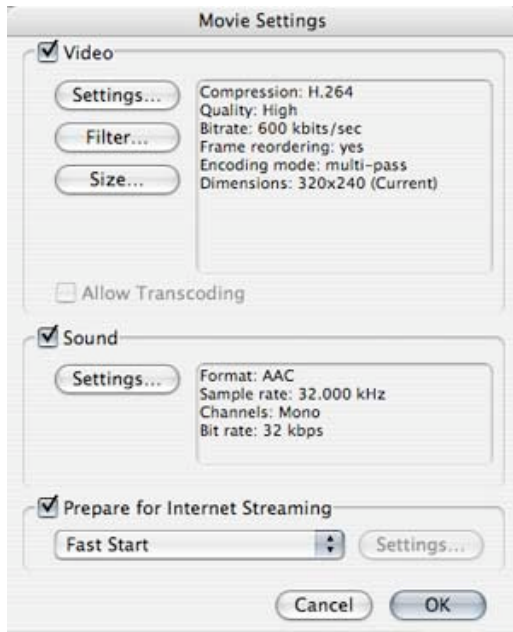
**Under Movie Settings**, **Video:**

-*Settings* – *this is the most important one* – you also have two options.

1. C**ompression type H.264** (best quality, takes longest to compress)

- *Key frames:* automatic
- *Encoding:* Best quality (multi-pass) - compressor quality bar will then likely be set to high w/out the option to change it - that's fine
- *Data rate:* this one is where all the change happens! The lower you set the number, the harder your file will be compressed. I don't recommend compressing in a data rate below 600. If it's a small size (320×240) and doesn't have a lot of movement, you can get away w/ 600-800. For larger and more complex files, (640×480, more movement), keep it around 1000kbits/second.
- *Optimized for:* download (H.264 works well, but you do have to be patient. Otherwise there's option two.)

2. **Compression type MPEG-4 Video** (takes less time to compress, but uses higher data rate, making the files larger; lots more room to change settings here, but also requires that you know more about what you're doing)

- *Frame rate:* Current fps (frames per second)
- *Key frames:* every 24 frames
- *Compressor quality:* (this is where you can adjust it yourself, I usually opt for somewhere from "medium - high")
- *Data range:* restrict to (never use automatic): like above, if small file, you can get away w/ 600-800 kbits/second. But because the quality of these files is less, you should usually stay above 1000, even for 320×240 files with little movement. You don't need to bump it above 3000 though – by then, it's all the same.

**Back under general export settings:**

- *Filter* – don't touch this one, ever
- *Size* – usually stays the same, called something like "current;" if you're compressing a big screen file into a tiny made-for-online video and want to shrink it down, there's a drop down list of sizes (320×240 is most common) and also a way to choose whether you letterbox the actual moving images for slight size changes.
- *NEVER* "*deinterlace source video.*"
- Under *Sound:* AAC, 32 kHz, Mono channels, Bit rate 32 kbps (for greatest compression), otherwise use 48kHz Stereo if sound important
- *Prepare for Internet streaming*: Pick "fast start" from the drop-down menu

- Save as a different file name for now and hit Export! You can always try a few different ways of exporting to toy w/ it and see how things show up. If you use MPEG-4, you may get some of those black pixel squares if you set the data rate too low.