

PUTTING VIDEO on the WEB

HTML5 makes it very easy to place video files on a web page. The only problem is that every browser has different formats that it can display. The solution is to have several versions of the video on the web server so the browser can choose which one it will actually display. All of this activity handled automatically so the page is not encumbered by extra code, and the processing is transparent to the viewer.

Image Quality

MP4 video using the H.264 codec has the best image quality of the set. This is the format to use for original compositions, and is the format of choice by media professionals. This is because it is the format that is supported by all professional video software. Ogg Theora on the other hand has the lowest quality, with WebM sitting in the middle.

Browser Compatibility

Different browsers support different formats. Native means the format will run right out of the box. 'With install' means the individual user would have to install a plug-in.

	H.264 (mp4)	WebM (VP8)	Ogg Theora
Safari	native	with install	no
Firefox	with install	native	native
Chrome	with install	native	native
Opera	no	native	native
Explorer	native	with install	with install

To have the widest comparability, especially for older computers, it is important to have all 3 file formats available:

For browsers on a computer we need **MP4**, **WEBM** and **OGG** format video files.
videoC4.mp4 (the original from After Effects)
videoC4.webmhd.webm
videoC4.oggtheora.ogv (becoming obsolete)

Smartphone Video

Smartphone are another matter. The first consideration is the actual resolution of the video file. If the file is too big it will not play, period. Smartphones should all be able to handle mp4 (H.264) files up to a maximum of 1280 x 720, or at least 960 x 640 that is native on the iPhone 4. It is reassuring to that this format is the highest quality of the video codecs, (aka, format). Android 2.2 and later supports **HTML5** video but uses the native player. It is better to use Firefox on these phones. As a provider, however, we have no control on how viewers use their devices, or even if they keep them u[dated].

For smartphones running Apple and Android OS we only really need 1 format:

videoC4.iphone4.mp4
videoC4.evo4g.mp4 (optional)
note: all of the Apple formats output by MIRO produce the same resolution and quality video files.

PUTTING VIDEO on the WEB, cont'd.

Here is the recipe to render a set of video files that will be playable in all of the popular browsers for computers as well as most up-to-date Smartphones:

Create a Folder for the Video Project Files

create _____ a folder on your computer
name it _____ [your_nameVideoC4](#)
save all files _____ created below into this folder

Download Special Software that converts rendered video to different formats

download _____ MIRO Video Converter from the web <http://www.getmiro.com>
copy _____ it to the Desktop (not the Applications folder)
open _____ MIRO Video Converter

Process the Original Video File

The original video created in AfterEffects file should be at 1080p for maximum quality. Save a copy of this file as the master. The filename can be anything.

A good size for a horizontal video file on a 15" MacBook Pro is 640 pixels high by either 960 or 1136 pixels wide (2:3 Photo or 16:9 HD format). This is also the native resolution of the iPhone. MIRO can be used to create a rescaled version of the original video to this size.

Run MIRO Video Rescale

drag _____ the video file into MIRO, or hit **CHOOSE FILE** to browse
open _____ the **SETTINGS** panel (small wheel icon on far right)
click on _____ custom size
enter _____ the desired height and width parameters
close _____ the **SETTINGS** panel
hit _____ the green **CONVERT TO CUSTOM** button
rename _____ the rescaled MP4 video file as [videoC4.mp4](#)
use _____ this file as the **source** for all the following conversions

Run MIRO Video Conversion

drag _____ the **rescaled** video file into MIRO, or hit **CHOOSE FILES** to browse
open _____ the **SETTINGS** panel
turn on _____ create thumbnails
this will produce the file [videoC4.mp4.png](#)
close _____ the **SETTINGS** panel
choose _____ **FORMAT> VIDEO> WEBM_HD**
hit _____ the green **CONVERT** button to make [videoC4.webmhd.webm](#)

Repeat this Process for Each Filetype Needed:

open _____ the **SETTINGS** panel
turn off _____ create thumbnails (only 1 is needed)
select _____ the following other formats and convert 2 more times:
make an **OGG THEORA** file: [videoC4.oggtheora.ogv](#)
make an **APPLE IPHONE4** file: [videoC4.iphone4.mp4](#)

Bring the Files Together

find _____ the output files and move them to your web folder
look _____ in the **MOVIES> MIRO VIDEO CONVERTER** folder
drag _____ everything into the video folder created at the start

PUTTING VIDEO on the WEB, cont'd.

The thumbnail created by MIRO is a full video size frame, saved in PNG format, and is referred to as a Poster Image.

the 'Poster' image is named [videoC4.mp4.png](#)

create _____ a thumbnail by reducing the Poster image

use _____ **PHOTOSHOP> SAVE 4 WEB**

JPEG HIGH preset, 100 pixels on **short** side

e.g. 100 x 150 pixels or 100 x 178 pixels [2:3 or 16:9]

name it _____ [your_nameVideoC4T.jpg](#) (case is critical)

Edit the **HTML5** Video Web Page

open _____ the example page on the class web site

save as _____ to your computer as [your_nameVideoC4.html](#)

edit _____ your name in the Video Web Template HTML page

edit _____ the title of the page with your name - video

save _____ the edited page into the same folder as the video files

Make sure all files are in the crit4 folder, named [your_nameVideoC4](#)

The final roundup of all files inside should be as follows (in Finder alphabetical order):

your__nameVideoC4	folder
videoC4.iphone4.mp4	
videoC4.mp4	rescaled from original After Effects file
videoC4.mp4.png	Poster image
videoC4.oggtheora.ogv	
videoC4.webmhd.webm	
your_nameVideoC4.html	video web page
your_nameVideoC4T.jpg	thumbnail for Student Gallery web page

Publish all Files

upload _____ the final folder into OWLbox

upload _____ the same folder to your server

link to the HTML home page to make it accessible

(the home link at the bottom may have to be altered for your site)

Everything will be uploaded onto two different web servers for all the world to enjoy!